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# Macworld

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January 2014

THE INSIDER'S GUIDE TO

# OS X Mavericks

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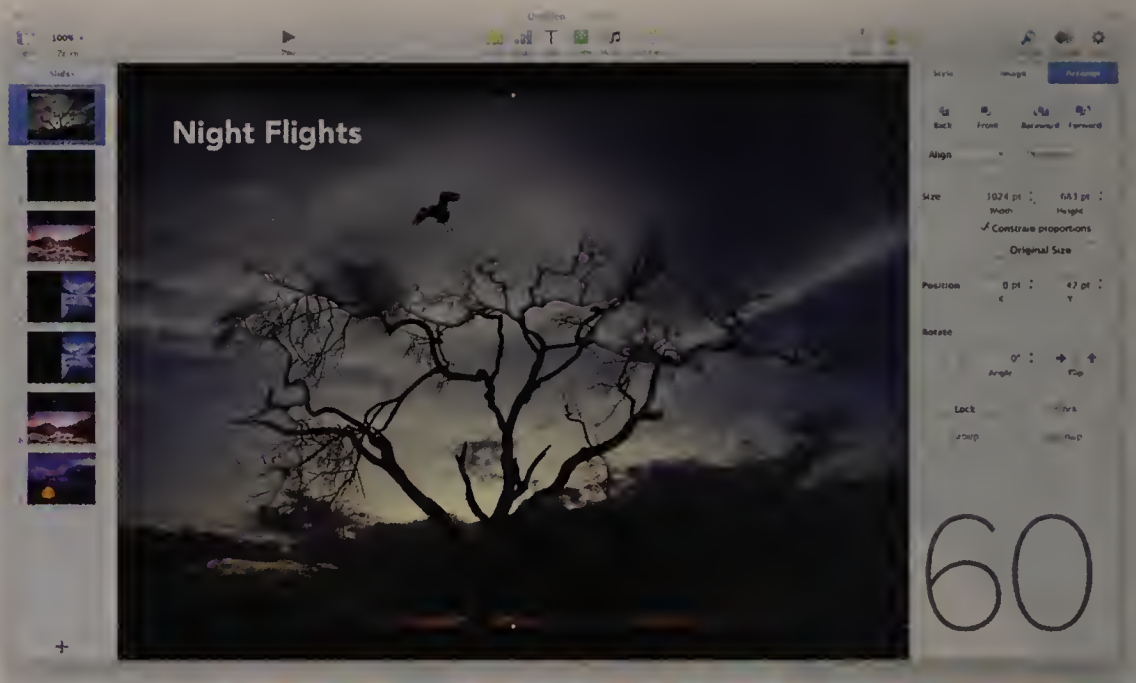

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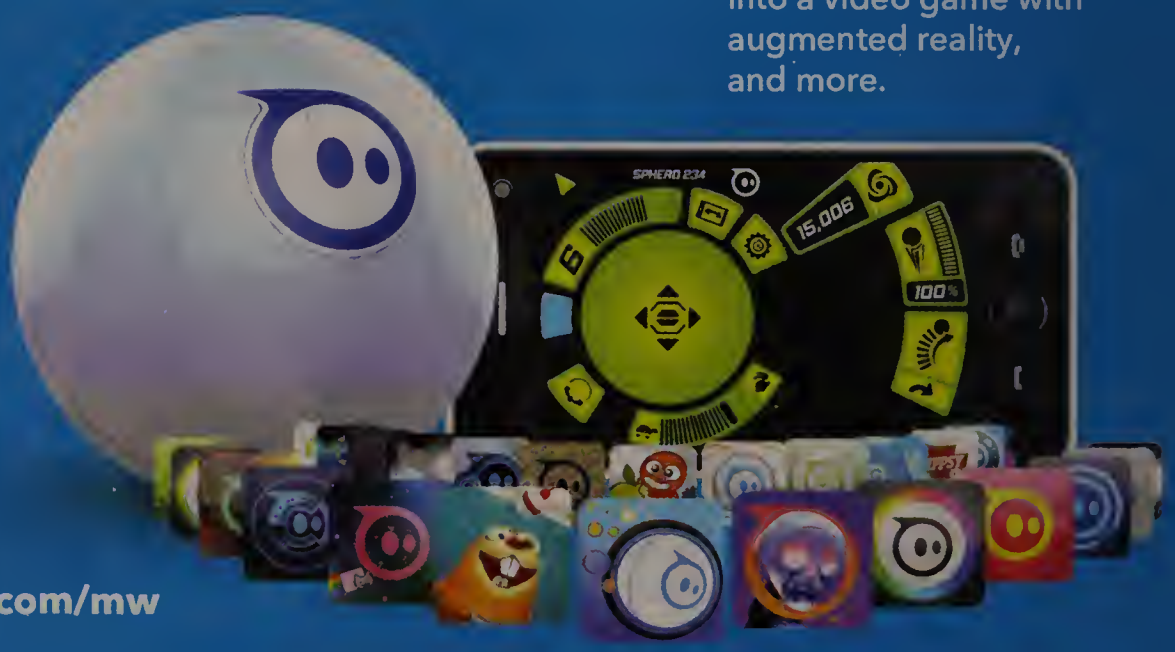


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# The Quest for a Bigger Smartphone Screen

For phones, size isn't everything, and Apple may be right to keep the iPhone where it is.

With the latest iPhone models racking up sales, Apple clearly isn't in any rush to make handsets with a bigger screen. To be fair, a change in screen size would have been unlikely for this year's iPhone; we've seen the product undergo a radical refresh roughly every other year, so it's no surprise that the iPhone 5c and 5s are incremental updates to the iPhone 5. Still, big phones are everywhere, and it's only natural to wonder whether Apple will follow suit.

## When Bigger Is Better

Of course, not so long ago the iPhone was the big phone. When the product launched in June 2007, it entered a market in which manufacturers had spent decades miniaturizing the large, unwieldy handsets of the 1970s and 1980s. Even the smartphones of the time were large only because they had to fit both a keyboard and a small screen.

With the iPhone, Apple's great insight was to eliminate the physical keyboard. The folks in Cupertino could also have decided to stick with something more like their competitors' tiny screens, ending up with a small device (think a square iPhone). Instead, Apple chose a full-size display, and the rest is history.

And then there was the transition from the iPhone 4s to the iPhone 5, in which Apple designed a bigger screen to accommodate a new, widescreen format. Remarkably, the company managed to create a new handset that was bigger but still felt smaller than its predecessor.

Apple isn't afraid to change its designs; but as with almost everything else it does, it is careful about what changes it makes. Instead of the biggest phone, Apple wants to make the ideal phone.

The most obvious benefit of a bigger screen is that you have more pixels. That means displaying more of a webpage or a text document, and, ideally, taking full advantage of high-resolution video to produce crisper, more detailed images.

> A switch to an all-around bigger screen would mean either creating different app designs or giving up on pixel perfection.

Screen size is only one of many different design decisions that make a good smartphone, however. The iPhone may not be the biggest handset, but that's because Apple has focused on making it feel good: It fits into hands large and small, it can be used easily with one hand, it looks natural when you're holding it to your ear, and it slides in and out of any pocket effortlessly.

## The Developer Factor

Yes, certain websites do not render well on the iPhone. The reason, though, is not the device's small screen but the fact that those sites' code is not optimized for smartphones. When developers know what they're doing, mobile webpages are often easier to use on the go than their desktop-bound counterparts are, with important information readily available when you need it in a hurry.

Speaking of developers, different screen sizes and resolutions would be unlikely to meet with approval from the people whose apps populate the iOS ecosystem. One of the many joys of writing software for Apple's mobile operating system is that there are only three resolutions to work with, which makes pixel-perfect designs easier to achieve and allows developers to build great apps in record time.

A larger phone with a higher resolution would throw a monkey wrench into that process. Unlike the transition from 3.5-inch to 4-inch handsets, which was fairly easy because the screen width remained the same, a switch to an all-around bigger screen would mean either creating completely different app designs or giving up on pixel perfection—neither of which sounds like the kind of scenario that Apple would want to foist upon its developer community.

Ultimately, screen size is a bit of a red herring. It's an easy differentiator for smartphone manufacturers, and it's one that analysts can latch onto when they try to justify predicting an end to Apple's continued success in the face of relentless competition and falling prices.

The real trick is coming up with the right screen size, and that's something Apple has so far managed to do very well. I have no idea whether the company plans to change the size of its phones' screens; I'm sure that somewhere in Jony Ive's labs, prototypes of all shapes and dimensions are being built and tested. If a bigger iPhone is to hit the market eventually, however, I hope that the question Apple chooses to answer is not *whether* it needs more pixels, but *why*.

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# Ring in the New Year

New products to play with, new problems to pursue, and new photos to peruse: Welcome to the January 2014 edition of *Macworld*'s reader feedback.

## IS APPLE DUMBING DOWN iWORK?

I'm in the camp that dislikes the direction Apple software is taking. The dumbing down of things makes it more difficult to get what you want done. If you fit Apple's mindset, and don't want to do anything other than the prescribed workflow, maybe it's slightly more efficient. When you deviate from that, the simplified interface is now in the way more often than it is helpful. Maybe as I use the software more, I'll get used to it, but that's a pretty drastic change from the past, where the software just made sense. I don't remember having to hunt so much to find what I'm looking for as I do now with the latest updates.

*—bjojade, via Macworld.com*

My 2009 apps are working just fine. I will use those until they figure out how to put the functionality I need in the new versions. I'd describe the new versions as "cute."

*—quakerotis, via Macworld.com*

*[See our Keynote and Pages reviews in* Working Mac, *page 60.]*

## THE NEW iLIFE

I am very happy about this [iMovie] update (the Mac version). The application is much easier to use. I can share clips with family and friends more quickly than I could in previous versions. And the background importing/rendering is a huge boon, as in the past I'd be excited to edit my clips but have to walk away and do something else while iMovie was paralyzed importing my clips from the camera. Now I can still use the program while import or render is going on in the background.

iMovie Theater is nice...but it's disappointing that it eats into iCloud storage, as it would be a nice way for me to archive movies for Apple TV watching. Guess I'll be using iTunes for that instead as before.

*—davidagalvan, via Macworld.com*

Dropping podcast functions [in Garageband] makes no sense. Any idea why Apple dropped the podcast support in Garageband and what a good alternative app might be? Seems like this will be a big deal for many. I think Garageband was the podcast creator of choice for many Mac users.

*—giwmooze, via Macworld.com*

*[See our iLife reviews in* Create, *page 77.]*

All reader communications to *Mocworld*—through mail, email, and our social networking accounts—are presumed to be intended for publication. We reserve the right to edit them for length and clarity.

## YOUR FAVORITE RECENT RELEASE

Our readers tell us which Apple products they were most excited to see.

**@erinstipp:** Mavericks. I'm in college, so I loved that it's free!

**@adamspelbring:** Mac Pro. I don't need one myself but many in my office do. But mostly I'm just really glad that they still care about the high end.

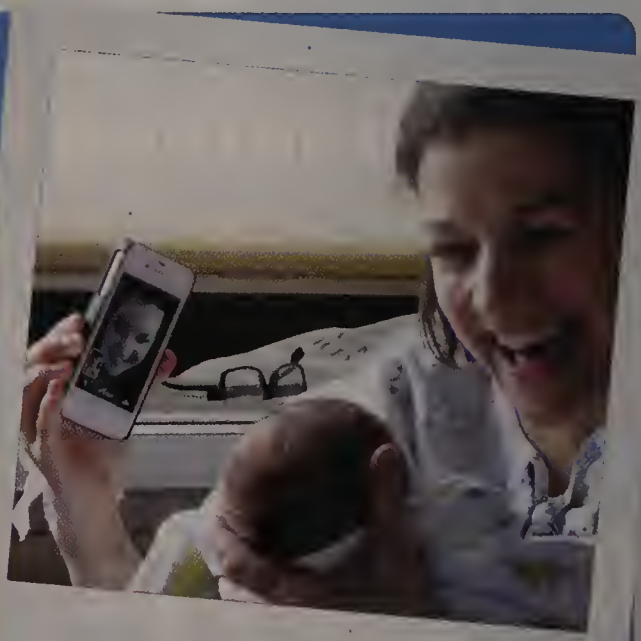
**@HuntHenning:** iWork/iLife for the Mac and iOS.

**@kevinhoule:** Retina iPad mini.

## THROUGH THE LENS: WELCOME TO THE WORLD

**Ryan Porche shared a very touching moment. "This was taken in Seattle, and the aunt on the FaceTime shot is in Peterhead, Scotland. This is special as it reminds us: Technology is at its best when it makes the most important parts of life even better."**

*Have a great Apple-centric photo? Send it to letters@macworld.com, and we may feature it in a future issue.*



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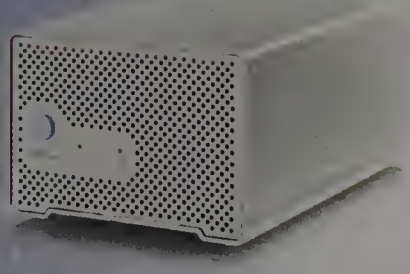

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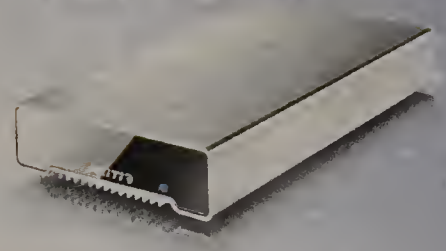

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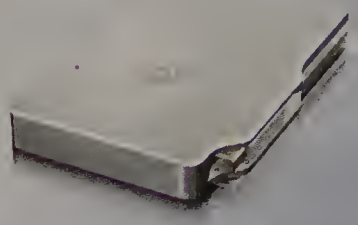

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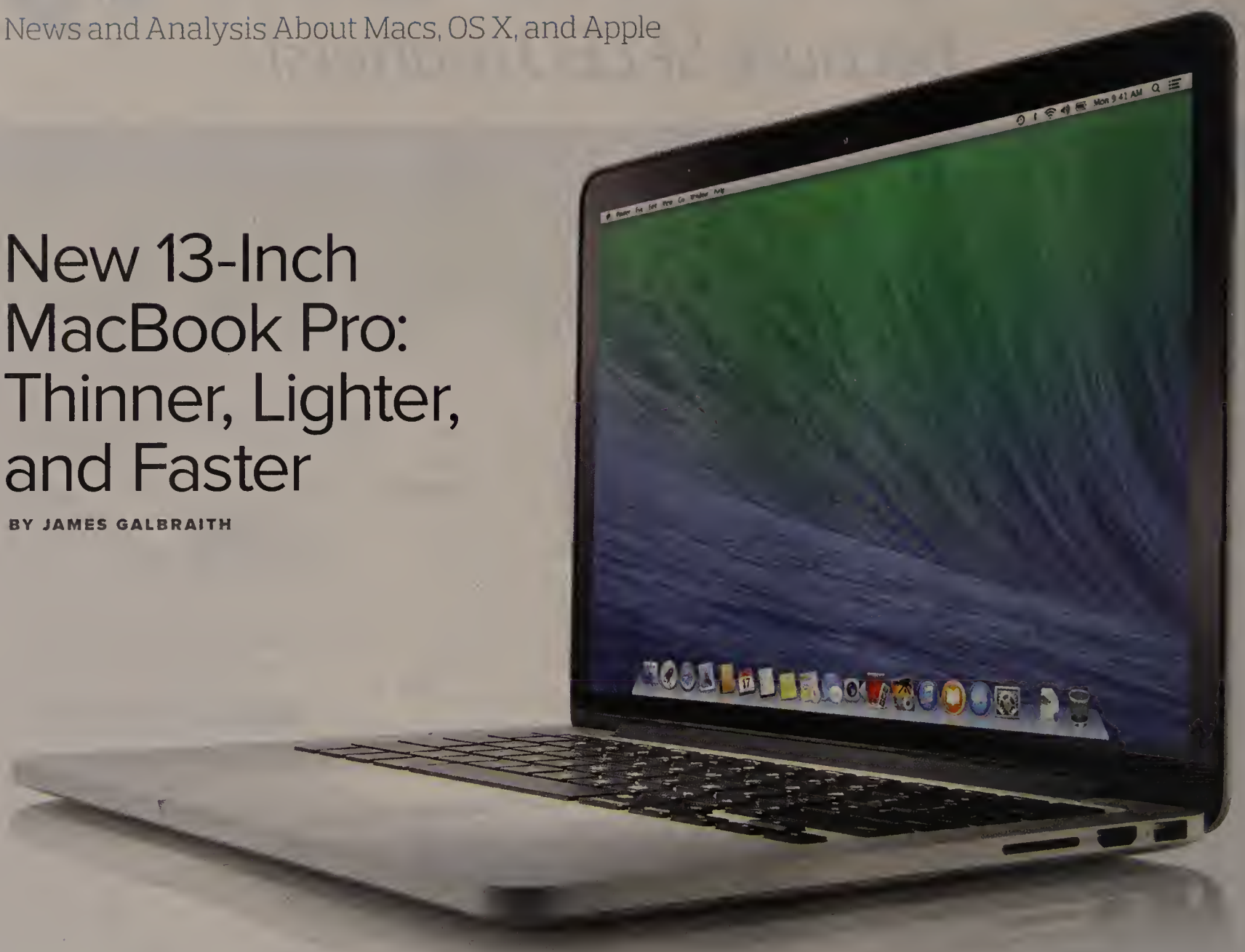
MacUser

News and Analysis About Macs, OS X, and Apple

# New 13-Inch MacBook Pro: Thinner, Lighter, and Faster

BY JAMES GALBRAITH



**Review**

**Apple 13-inch MacBook Pro/2.4GHz Core i5 (Late 2013)**
RATING ★★★★
PRICE $1299

**Apple 13-inch MacBook Pro/2.6GHz Core i5 (Late 2013)**
RATING ★★★★½
PRICE $1799
COMPANY Apple
URL apple.com

You may not know it to look at them, but the latest 13-inch MacBook Pro with Retina display models are thinner and lighter than the Retina systems they replace. Lighter is always better in a portable—but factor in the new MacBook Pro's increased battery life and the faster integrated graphics, and you have a laptop you can love.

The 13-inch models aren't the only new laptops in Apple's MacBook Pro line. The company is also releasing a pair of new 15-inch models: a $1999 Retina MacBook Pro with a 2.0GHz quad-core Core i7 processor, and a $2599 Retina MacBook Pro with a 2.3GHz quad-core Core i7 CPU. *Macworld* will have a full review of these two laptops in an upcoming issue.

The new 13-inch Retina MacBook Pros look very similar to the previous crop (released in February), but they are 2 ounces lighter and 0.04 inch thinner. Even when you compare a new model side by side with an early-2013 Retina MacBook Pro, the difference isn't obvious.

The new 13-inch Retina MacBook Pros have the same connections and ports as the previous versions: one HDMI port, two USB 3.0 ports, a headphone jack, and an SDXC card slot.

The new laptops also have two Thunderbolt 2 ports, which are supposed to give faster throughput than the previous-generation Thunderbolt ports that the older laptop carried. Though some manufacturers have announced Thunderbolt 2 peripherals, none of these products have yet arrived in our lab for testing. Thunderbolt 2 uses the same cables and connectors as Thunderbolt—but to get

Lighter is always better in a portable—but factor in increased battery life and faster integrated graphics, and you have a laptop that you can love.

PHOTOGRAPHY BY ROBERT CARDIN

the increased bandwidth, you need Thunderbolt 2 devices.

Like previous Retina MacBook Pros, the new 13-inch models lack ethernet ports, FireWire connectors, and optical drives. Those extras will need available adapters, and you'll have to connect the optical drive externally. If you need FireWire and an optical drive more than anything else, you can buy Apple's non-Retina MacBook Pro with a built-in SuperDrive and FireWire 800 for $1199.

Apple updated the built-in Wi-Fi to support the latest 802.11ac specification. As we found in the latest MacBook Air with 802.11ac Wi-Fi, this new spec permits much faster wireless transfer speeds.

The bright and glossy Retina display remains unchanged, which is fine with me. It packs a resolution of 2560 by 1600 pixels into a 13.3-inch-diagonal screen. When you use the laptop in the default 1280-by-800-pixel doubled mode, the individual pixels that make up images and text are not discernible.

### Entry-Level or High-End?

All of the new 13-inch MacBook Pros come with fourth-generation Intel Core i5 (Haswell) processors. The entry-level 13-inch Retina MacBook Pro costs $1299 and has a dual-core 2.4GHz Core i5 processor and 128GB of flash storage. Its relatively low storage capacity may limit the amount of music, movies, and photos you can keep locally, but you can work around that ceiling by using external drives and cloud storage. More problematic is the smallish 4GB of RAM included with the $1299 MacBook Pro, especially since you can't upgrade memory on these laptops after purchase. With that in mind, consider ordering your MacBook Pro with the $100 optional upgrade to 8GB of RAM. Alternatively, you can choose the $1499 model, which has the same processor as the $1299 laptop, but with 8GB of RAM and 256GB of flash storage.

The high-end 13-inch Retina MacBook Pro, priced at $1799, has a dual-core 2.6GHz Core i5 processor with 8GB of RAM and 256GB of flash storage.

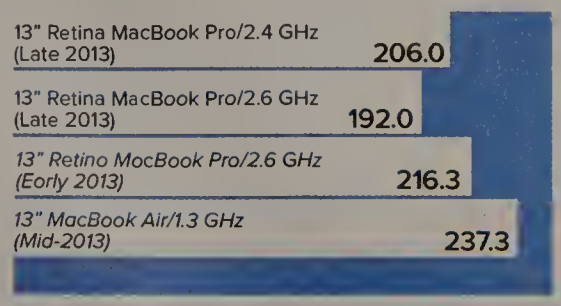
### Speed Improvements

The new Retina MacBook Pros use PCIe-connected flash storage, which can be much faster than the SATA-connected flash that earlier MacBook Pros used. The smaller-capacity flash in the 2.4GHz laptop was relatively poky at writing data, but it was fast at reading; and matched against last year's entry-level model with its 256GB SATA flash storage, the laptops had identical speeds. On the new high-end 2.6GHz Retina MacBook Pro, copying 6GB of files and folders from one spot on the drive to another was 34 percent faster than the same task on the early-2013 2.6GHz model.

Like the 13-inch models preceding these, the new Retina models rely on integrated graphics. This year, however, the systems use Intel's higher-end Iris graphics technology. Our tests show the

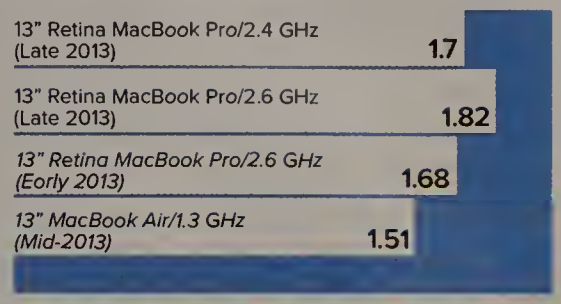
## Macworld Lab Tests

### Benchmarks: HandBrake Encode



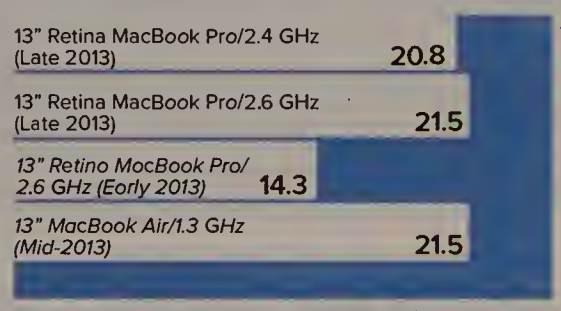

Results are in seconds. Shorter bars/lower results are better. Reference models in italics.

### Benchmarks: MathematicaMark 9




Results are scores. Longer bars/higher results are better. Reference models in italics.

### Benchmarks: Cinebench OpenGL




Results are in frames per second. Longer bars/higher results are better. Reference models in italics.

PHOTOGRAPH COURTESY OF APPLE

new MacBook Pros getting between 45 and 65 percent higher frame rates than the early-2013 models, with their Intel HD 4000 integrated graphics.

We also ran our benchmarks on a recent 13-inch MacBook Air—a $1099 model with a 1.3GHz dual-core Haswell Core i5 CPU, 128GB of flash storage, 4GB of RAM, and Intel HD 5000 graphics. The new entry-level $1299 13-inch Retina MacBook Pro was 13 percent faster than that MacBook Air in both our HandBrake and MathematicaMark 9 tests. Cinebench OpenGL and Heaven graphics test results were about the same, but the frame rates we obtained on the Valley benchmark test were 25 percent higher on the Pro than on the Air. The 13-inch MacBook Air is a pound lighter and a tad thinner than the MacBook Pro, but of course it also lacks the ultra-high-resolution Retina display of the MacBook Pro.

### Battery Life

Both new 13-inch MacBook Pros lasted much longer on a single battery charge than the early-2013 models did. The new entry-level 13-inch Retina lasted 10 hours, 51 minutes in our wireless Web-browsing test, while the high-end 13-incher lasted 10 hours, 11 minutes. The previous model lasted just 7 hours, 15 minutes. For its part, the MacBook Air survived for 12 hours, 42 minutes in our Wi-Fi Internet-browsing battery test.

### Bottom Line

With much-improved battery life and graphics performance, the late-2013 13-inch MacBook Pro with Retina display should have owners of older Mac laptops looking to upgrade. The entry-level model's 128GB of flash storage may not be spacious enough to accommodate all of your media files, however, and you should seriously consider doubling the 4GB of soldered-down RAM to 8GB at the time of purchase. The high-end unit's higher price seems to be justified by its faster CPU, standard 8GB of RAM, and 512GB of superfast flash.

# 2013 Mac Pro Workstation Is Shipping as of December

BY JAMES GALBRAITH

Around the time you read this, power users with money to burn will have a present to buy for themselves, as Apple's new Mac Pro desktop workstation—which the company previewed back in June—finally becomes available for purchase. The company announced the Mac Pro shipping time frame in October.

The $2999 configuration includes an Intel 3.7GHz Xeon E5 processor with 10MB of L3 cache and Turbo Boost up to 3.9GHz, 12GB of 1866MHz ECC DDR3 RAM (installed as three 4GB modules, leaving one RAM slot open), 256GB of PCIe-based flash storage, and two AMD FirePro D300 GPUs (2GB of VRAM each).

Apple also offers a $3999 model, which has a six-core 3.5GHz Xeon E5 processor with 12MB of L3 cache and Turbo Boost up to 3.9GHz, 16GB of 1866MHz ECC DDR3 RAM (installed as four 4GB modules, filling all of the Mac Pro's RAM slots), 256GB of PCIe-based flash storage, and two AMD FirePro D500 GPUs (3GB of VRAM each).

Apple offers various customization options, but as of this writing it had not made available its online configurator listing prices for the upgrades. According to the technical specifications, processor upgrades include an eight-core 3GHz Xeon E5 with 25MB of L3 cache, and a 12-core 2.7GHz Xeon E5 with 30MB of L3 cache. The RAM is upgradable to 64GB, and an extra 512GB or 1TB of flash storage is available. You can have the graphics upgraded to dual AMD FirePro D700 cards, each with 6GB of GDDR5 VRAM.

At October's announcement event, Apple boasted of the Mac Pro's 7 teraflops of graphics performance, versus the previous 2.7 teraflops of the old Mac Pro. The two FirePro GPUs can support up to three 4K displays. (A 4K display has a native screen resolution of 3840 by 2160 pixels. By comparison, Apple's Thunderbolt Display and 27-inch Cinema Display have 2560-by-1440-pixel resolution.)

With a height of 9.9 inches and a diameter of 6.6 inches, the 2013 Mac Pro has no room for expansion via PCI cards or internal storage devices. Mac Pro users must rely on the machine's six Thunderbolt 2 ports and four USB 3.0 ports to connect such devices. Users of the previous Mac Pro tower who have expansion cards or internal storage that they still want to use will have to purchase external boxes for housing those devices—an extra cost to factor in when buying one of the new Pros. Each Thunderbolt 2 port supports up to six daisy-chained devices, so the Mac Pro can support up to 36 Thunderbolt peripherals.

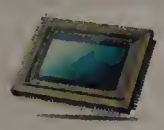
Once you remove the machine's metal sleeve, you can access the Mac Pro's four memory slots, so you can upgrade the RAM after purchase. The flash-storage card connects to a socket in the Mac Pro, making it replaceable if aftermarket flash-storage upgrades come out.

PHOTOGRAPH COURTESY OF APPLE

Blackmagicdesign

# Shoot the next Hollywood blockbuster with the world's most amazing digital cinema camera!

The world's most mind blowing feature films, television commercials and music videos look amazing because they are filmed with digital film cameras! The new award winning Blackmagic Cinema Camera is unlike a regular video camera or DSLR camera because it's a true high end digital film camera! You get a true Hollywood cinematic look with 13 stops of dynamic range, interchangeable lenses, high quality RAW and ProRes® file recording plus much more!



**Dramatically Better than DSLR Video**

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**Super Wide Dynamic Range**

The Blackmagic Cinema Camera captures an incredible 13 stops of dynamic range so you can simultaneously capture the brightest highlights and the darkest shadows all at the same time into the recorded file! This means you capture more of the scene than a regular video camera can so you get more freedom for color correction for a feature film look! You also get a full copy of DaVinci Resolve!

**Film Industry Quality**

Every feature of the Blackmagic Cinema Camera has been designed for quality. With 2 separate models, you can choose from the world's most amazing EF or MFT lenses from crafters such as Canon™, Zeiss™ and more. For extreme high end work, you can shoot full 12 bit CinemaDNG RAW uncompressed files for incredible creative range in DaVinci Resolve color correction, as well as the world's best chroma keying!

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High end cinema cameras often require thousands of dollars of extra accessories to make them work, however the Blackmagic Cinema Camera includes accessories you need built in! You get a large 5 inch monitor, super fast SSD RAW recorder and professional audio recorder all built in! You also get UltraScope software, used via the built in Thunderbolt™ connection, for on set waveform monitoring!

Blackmagic Cinema Camera

**$1,995**

Includes DaVinci Resolve Software

Learn more today **www.blackmagicdesign.com/cinemacamera**

# Modest Gains for the New Entry-Level Haswell iMac

BY JAMES GALBRAITH

**Review**
RATING
PRICE
$1299
COMPANY
Apple
URL
apple.com

The new 21.5-inch iMac is a beautifully designed all-in-one computer. Its gleaming aluminum body, seamless ultrathin edges, and bright, LED-backlit IPS screen make the iMac a droolworthy desktop. Its design, though, is externally identical to the late-2012 iMacs. The updates are all internal.

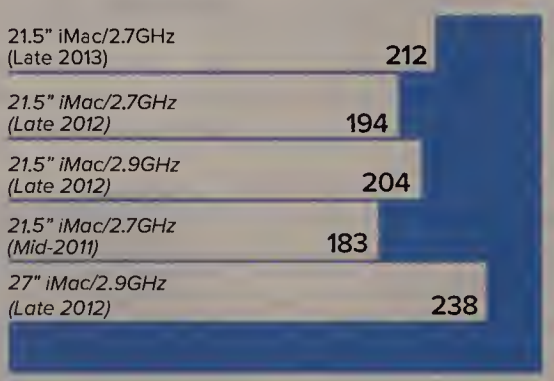
The $1299 entry-level iMac has a 1TB hard drive, 8GB of RAM, a 21.5-inch screen with 1920 by 1080 resolution, and a 2.7GHz quad-core Intel Core i5 CPU—just like the 2012 entry-level iMac.

But whereas those iMacs used Intel's Ivy Bridge Core i5 CPU, the 2013 units incorporate Intel's fourth-generation Core processors, code-named Haswell, which are higher-performing and more efficient.

Unlike other 2013 iMacs, the low-end iMac in this review uses Intel's Iris Pro integrated graphics; Intel claims that it should perform similarly to a discrete GPU and should be up to twice as fast as the integrated graphics that shipped with Ivy Bridge. Integrated graphics share memory with the CPU, but the Iris Pro, while still sharing memory, can access up to 128MB of dedicated on-chip memory.

## Macworld Lab Test

Benchmarks: Speedmark 8




Higher scores/longer bars are better. Reference models in italics. Macworld Lab testing by James Galbraith and Albert Filice.

### Features and Performance

This iMac shares the limitations of the 2012 models: a lack of upgradability, and features—such as an optical drive—that were dropped to slim down the design. The RAM slots are not user-accessible. All 2013 iMacs ship with a generous 8GB of 1600MHz DDR3 SDRAM (16GB is an extra $200). The back has two Thunderbolt ports, four USB 3.0 ports, a headphone jack, and one gigabit ethernet port.

Apple also continues to use 5400-rpm hard drives in the smaller iMacs. These 5400-rpm drives have a larger cache and perform better than most 2.5-inch drives.

The new iMac has an internal PCIe connection for use with optional upgrades of flash storage. PCIe-connected flash storage is considerably faster than SATA-connected flash. The new iMacs don't come with flash storage, but you can upgrade the machine when you buy.

We ran our Speedmark 8 test suite on the new iMac and compared the results with recent models. It was 9 percent faster overall than the entry-level iMac it replaces, and 4 percent faster than last year's 21.5-inch iMac with a 2.9GHz Core i5 Ivy Bridge processor.

In CPU performance, the new iMac was faster by 12 percent in MathematicaMark and by 14 percent in the Cinebench CPU test than last year's iMac.

In graphics tests, the new iMac posted a 9 percent higher frame rate in *Portal 2* than last year's entry-level iMac with discrete Nvidia GeForce GT 640M graphics, and it beat the 640M in Cinebench r11.5's OpenGL test, with 52 frames per second versus 35.6 fps on last year's iMac.

Hard-drive tests also showed improvement over last year's iMac, though both use 1TB 5400-rpm drives. Our 6GB file copy test was 9 percent faster on the new iMac than on last year's version.

The new $1299 entry-level iMac may not be nearly as groundbreaking as its predecessor, but its updated internals offer welcome, if subtle, performance enhancements.

PHOTOGRAPHS COURTESY OF APPLE

# Benchmarks: 'Ultimate' iMac Gets Boost From PCIe Flash Storage, Faster CPU

BY JAMES GALBRAITH

The new 2013 iMacs come in four standard configurations: two 21.5-inch models, and two with 27-inch screens. You can have these new iMacs configured to order (CTO) at the time of purchase with an assortment of options. Macworld Lab obtained an "ultimate" configuration of a 2013 iMac that combines most of the upgrades.

### CTO Configuration

Our CTO 27-inch iMac takes the $1999, high-end configuration and upgrades the processor from a 3.4GHz quad-core Core i5 CPU to a 3.5GHz quad-core Core i7, a $200 option. The memory stays at 8GB.

Our ultimate iMac upgrades the standard 1TB, 7200-rpm hard drive to a 3TB Fusion Drive, a $350 upgrade. It contains an upgraded graphics card as well—an Nvidia GeForce GTX 780M with 4GB of video memory rather than the standard GTX 775M with 2GB of RAM. That brings the retail price of our CTO iMac to $2699.

We didn't have a current $1999 iMac to use as a baseline, but we did have the 2012 Ultimate iMac, plus last year's top-of-the-line, standard-configuration iMac.

### Performance Results

In our performance test suite, Speedmark 8, the new CTO iMac was 6 percent faster overall than last year's custom iMac, a 27-inch model with a 3.4GHz quad-core Core i7 (Ivy Bridge) processor, a 1TB Fusion Drive, 8GB of RAM, and Nvidia GeForce GT 680MX graphics with 2GB of video RAM. The new custom iMac was 48 percent faster than last year's top-of-the-line iMac and 57 percent faster than the new entry-level 21.5-inch iMac.

> Much of the performance enhancement in the new CTO iMac is due to its fast Fusion Drive, a flash/hard-drive hybrid.

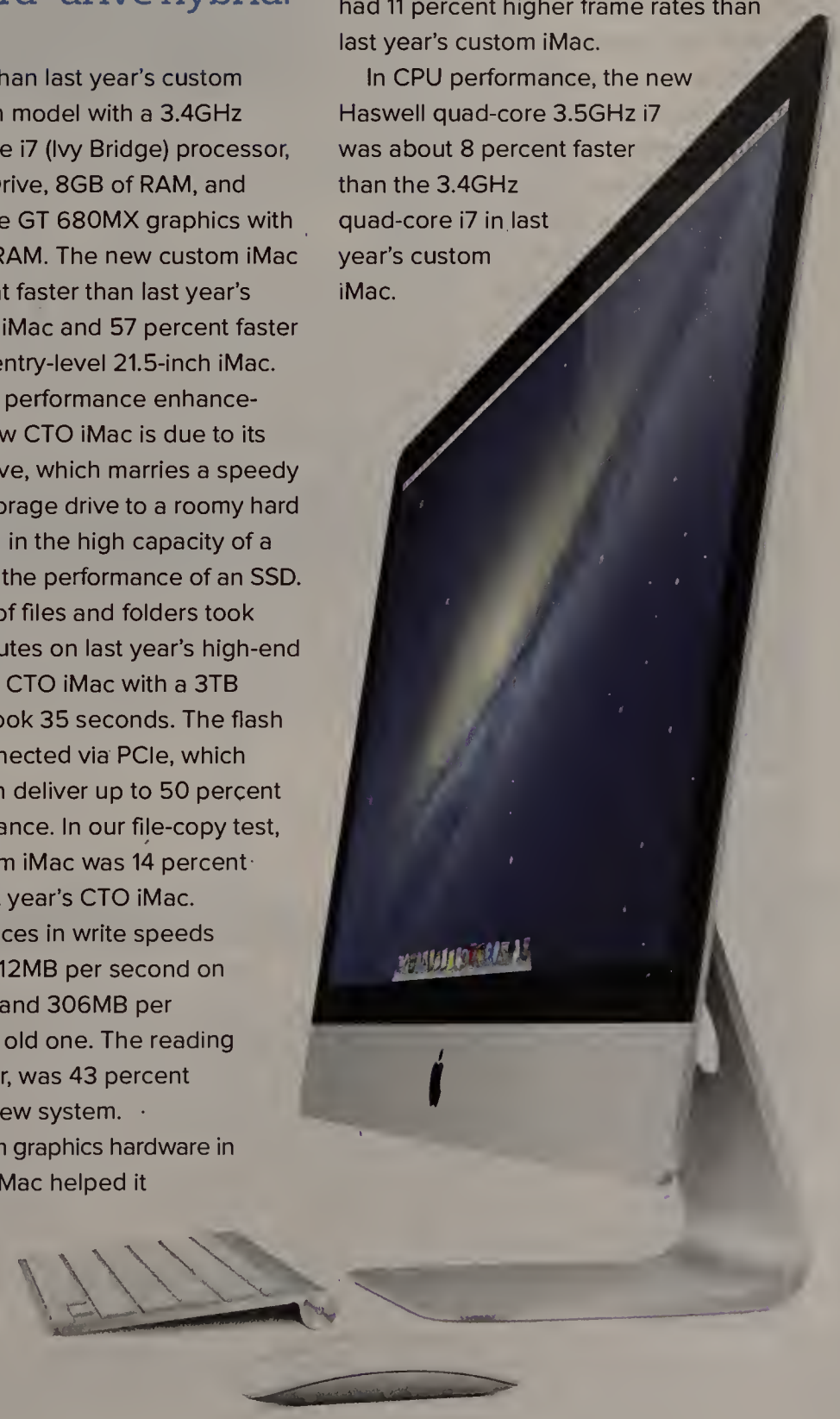
Much of the performance enhancement in the new CTO iMac is due to its fast Fusion Drive, which marries a speedy 128GB flash storage drive to a roomy hard drive, resulting in the high capacity of a hard drive and the performance of an SSD. Copying 6GB of files and folders took nearly 2.5 minutes on last year's high-end iMac. The new CTO iMac with a 3TB Fusion Drive took 35 seconds. The flash storage is connected via PCIe, which Apple says can deliver up to 50 percent faster performance. In our file-copy test, our new custom iMac was 14 percent faster than last year's CTO iMac.

The differences in write speeds were similar: 312MB per second on the new iMac, and 306MB per second on the old one. The reading score, however, was 43 percent faster on the new system.

The premium graphics hardware in the new CTO iMac helped it achieve a 29 percent higher frame rate than last year's iMac in the Cinebench r11.5 OpenGL test. But the new CTO iMac's frame rates were only 10 percent faster than those of the Iris Pro integrated graphics in the entry-level iMac.

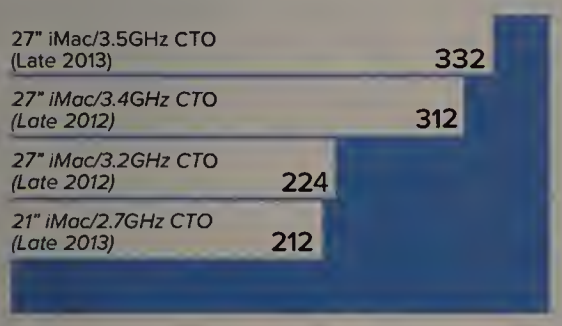
In our standard Speedmark *Portal 2* game test, the new CTO 27-inch iMac had 11 percent higher frame rates than last year's custom iMac.

In CPU performance, the new Haswell quad-core 3.5GHz i7 was about 8 percent faster than the 3.4GHz quad-core i7 in last year's custom iMac.



## Macworld Lab Test

Benchmarks: Speedmark 8




All results are scores. Higher scores/longer bars are better. Reference models in italics. Macworld Lab testing by James Galbraith and Albert Filice.

# Woz Recalls His Youthful Hacking Pranks

BY ELLEN MESSMER

Apple cofounder Steve Wozniak admits he has enjoyed many adventures in hacking pranks on friends and family, especially back in his college days and during the early years of working on computers and the Internet.

"I like to play jokes," Wozniak told an audience of thousands of security professionals attending a conference in Chicago in September. He confessed he also had some fun with lighthearted forays into computer and telecommunications networks in his college years.

People with imagination in engineering are naturally drawn to the idea of finding ways to bypass security controls as part of the process of discovering how things work, and Wozniak said that this was especially true of himself.

"But I never once hacked a computer for real," he told his audience, meaning that his break-ins and intrusions were done only in the spirit of exploration, and never for profit or malice.

As to his famous partnership with Steve Jobs, Wozniak said the two "became best friends instantly" and shared a fascination with finding out how networks functioned.

Circumventing the controls placed by authority was sometimes part and parcel of satisfying the enormous drive he had as a budding computer engineer to experiment and grow in knowledge, he noted. Wozniak said he had a friend with the key to the college computing room, and he sneaked in during the middle of the night to run his computing programs on punch cards.

Wozniak said one of his favorite pranks was coming up with a TV jammer that he secretly used to convince friends their TV sets were malfunctioning, while at the same time instructing them in outlandish ways to "fix" the problems—until he secretly stopped jamming their sets.

# Macs: Current Lineup

| PRODUCT | SPECS | RATING | PRICE | DISPLAY | SPEEDMARK 8[1] | MORE INFO |
|---|---|---|---|---|---|---|
| **DESKTOP** | | | | | | |
| iMac | Intel Core i5/2.7GHz (quad-core) | 3½ | $1299 | 21.5 inches | 212 | go.macworld.com/imac212713 |
| | Intel Core i5/2.9GHz (quad-core) | n/a[2] | $1499 | 21.5 inches | n/a[2] | go.macworld.com/imac212913 |
| | Intel Core i5/3.2GHz (quad-core) | n/a[2] | $1799 | 27 inches | n/a[2] | go.macworld.com/imac273213 |
| | Intel Core i5/3.4GHz (quad-core) | n/a[2] | $1999 | 27 inches | n/a[2] | go.macworld.com/imac273413 |
| Mac Mini | Intel Core i5/2.5GHz (dual-core) | 4 | $599 | Not included | 131 | go.macworld.com/mini2512 |
| | Intel Core i7/2.3GHz (quad-core) | 4 | $799 | Not included | 164 | go.macworld.com/mini2312 |
| Mac Pro | Intel Xeon/3.2GHz (quad-core) | 3½ | $2499 | Not included | 200 | go.macworld.com/macpro3212 |
| | Intel Xeon/2.4GHz (12-core) | 3½ | $3799 | Not included | 215 | go.macworld.com/macpro2412 |
| **PORTABLE** | | | | | | |
| MacBook Air | Intel Core i5/1.3GHz, 128GB | 4½ | $999 | 11 inches | 165 | go.macworld.com/air1281113 |
| | Intel Core i5/1.3GHz, 256GB | 4½ | $1199 | 11 inches | 165 | go.macworld.com/air2561113 |
| | Intel Core i5/1.3GHz,128GB | 4½ | $1099 | 13 inches | 166 | go.macworld.com/air1281313 |
| | Intel Core i5/1.3GHz, 256GB | 4½ | $1299 | 13 inches | 166 | go.macworld.com/air2561313 |
| MacBook Pro | Intel Core i5/2.5GHz (dual-core) | 3½ | $1199 | 13 inches | 121 | go.macworld.com/macbook132512 |
| | Intel Core i5/2.4GHz (dual-core), 128GB | 4 | $1299 | 13-inch Retina | n/a[2] | go.macworld.com/macbook1312813 |
| | Intel Core i5/2.4GHz (dual-core), 256GB | n/a[2] | $1499 | 13-inch Retina | n/a[2] | go.macworld.com/macbook1325613 |
| | Intel Core i5/2.6GHz (dual-core) | 4½ | $1799 | 13-inch Retina | n/a[2] | go.macworld.com/macbook132613 |
| | Intel Core i7/2.0GHz (quad-core) | 3½ | $1999 | 15-inch Retina | n/a[2] | go.macworld.com/macbook152013 |
| | Intel Core i7/2.3GHz (quad-core) | 4½ | $2599 | 15-inch Retina | n/a[2] | go.macworld.com/macbook152313 |

[1]Speedmark 8 is Macworld Lab's standard test tool for benchmarking systems running Mac OS X 10.8 (Mountain Lion). For more information, see [illegible]. [2] New model; not yet tested

PHOTOGRAPHY BY PAUL SMITH/FEATUREFLASH

QNAP

# Your Creative Source

Powerful, High Performance Centralized Storage for Video Editors, Studios, and Designers

Turbo NAS
TS-470 Pro

* QNAP TS-x70 Pro range; TS-470 Pro, TS-670 Pro, TS-870 Pro

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intel inside CORE i3

Supports Time Machine backup

Enjoy videos via AirPlay

Access from anywhere

# Mac Gems

Discover Great, Low-Cost Mac Products **Edited by Dan Frakes**

PHOTOGRAPHY

## PhotoReviewer 2.2.1

4½; $15; Stick Software; sticksoftware.com

We all need a good way to "triage" the flood of photos from our digital cameras. PhotoReviewer has been around a long time, and for years it was the best app I'd found for this job, but it hadn't been updated for newer operating systems—until now. It works great with OS X 10.8 and 10.9.

To use PhotoReviewer, drag a folder or volume of images onto its icon (or into the setup window for a new review). Click *Start*, and PhotoReviewer shows your images in a viewer window, with thumbnails in a list on the left and the selected image on the right.

By default, pressing the plus (+) key on your keyboard (or clicking the *Approve* button) accepts the current photo, while pressing the minus (–) key or clicking *Veto* rejects it, pulling up the next photo.

You can view the approved or rejected images by clicking the + or – buttons that appear above the thumbnail list; there you can edit each image's status.

For simple yes/no sorting, you just keep your fingers on the + and – keys and fly through your images, approving or rejecting each.

If yes/no isn't granular enough, you can add up to eight categories and use the number keys to assign categories to the photos.

Once you've reviewed all the photos in your list, PhotoReviewer prompts you to process them. Click *Yes* and choose your options, and the app automatically sorts your photos into folders, a process that takes mere seconds.—DAN FRAKES

VIDEO

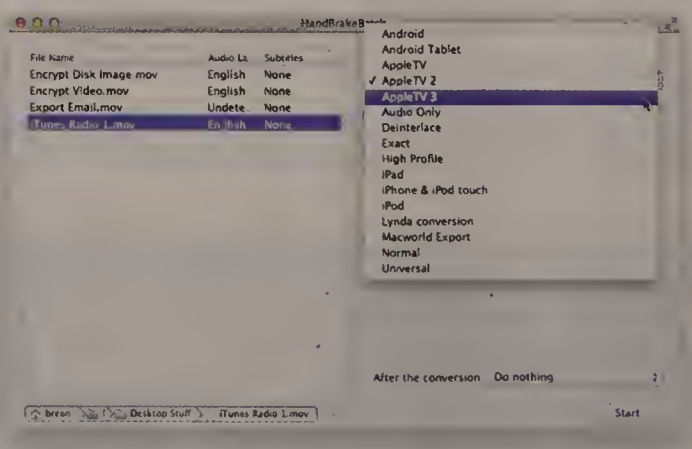
## HandBrakeBatch 2.22

4½; free (donation to charity requested); Cesare Tagliaferri; osomac.com

Though HandBrake (handbrake.fr) is a great tool for ripping the DVDs you own, it doesn't handle *batch processing*—the conversion of a bunch of video files at once—elegantly. It's not as easy as dragging movies into a window, choosing a preset, and then starting the conversion.

But one utility excels at batch processing: Cesare Tagliaferri's HandBrakeBatch, which includes the open-source components of HandBrake that are necessary to perform conversions. The utility is free to download, but the developer asks that if you find it useful, you donate to a charity.

Launch HandBrakeBatch, and a window opens. Into this window you drag any and all videos you want to convert. Click the *HandBrake Preset* pop-up menu to see all of HandBrake's default conversion presets (and any custom presets you've added), and then choose the preset you desire.




Finally, select the folder where you want the converted files saved. Click *Start*, and HandBrakeBatch uses the engine that powers HandBrake to perform the conversions.

HandBrake now contains a batch-processing feature, so HandBrakeBatch won't be updated further, but I find HandBrakeBatch's workflow enough of an improvement that it's still worth recommending. It's an easy way to convert multiple video files to common formats.—CHRISTOPHER BREEN

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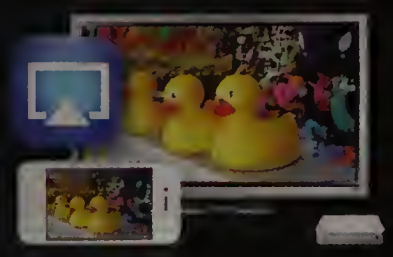

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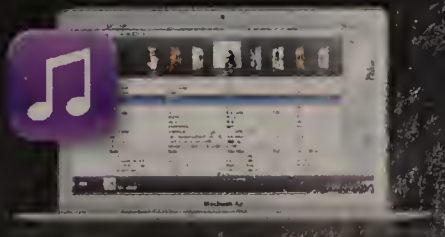

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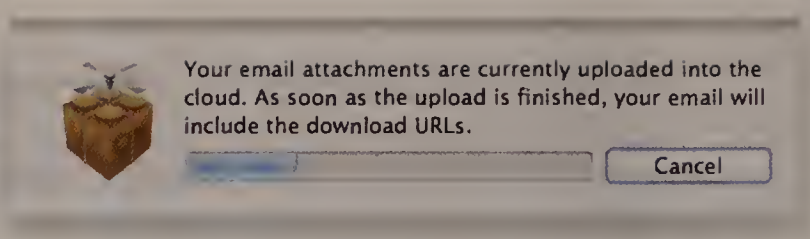
# CargoLifter 1.2.1

★★★★; $10; ChungwaSoft; chungwasoft.com




Email has come a long way, but it's still a bother to send large files as attachments. Some email accounts impose size limits on attachments, and many people check email on mobile devices, where large attachments can be both difficult to manage and expensive to download.

Hence the popularity of cloud-based file-sending services. Instead of attaching a large file to an email message, you upload the file to cloud storage (a server that you connect to over the Internet). The service then provides you with a URL for downloading the file, and you include that URL in your message.

When you install CargoLifter—a nifty add-on to Mail—you get a new screen of settings in Mail's Preferences window. The one-time setup process requires you to choose your preferred cloud-storage service and then authorize CargoLifter to access that service, which can be Dropbox, YouSendIt, CloudApp, Droplr, Dropmark, MediaFire, Box, or Google Drive, as well as any standard FTP, SFTP, or WebDAV server. (CargoLifter worked well with the services I tested.)

When you're about to send a message with a large attachment, CargoLifter by default displays an alert box asking if you want to upload the attachment or send it normally. Click *Upload Attachments*.

When the upload is finished, CargoLifter removes the attachment from the message and replaces it with the appropriate download URL, plus text explaining to the recipient that your attachment is available online; the text includes the download name, the total size of each download, and the URL.

Among other tweaks, you can disable the attachment prompt (so CargoLifter automatically uploads attachments without asking) and enable automatic sending.

If you regularly include large attachments in email messages, CargoLifter can streamline your email workflow—you may even forget it's not part of Mail.—DAN FRAKES

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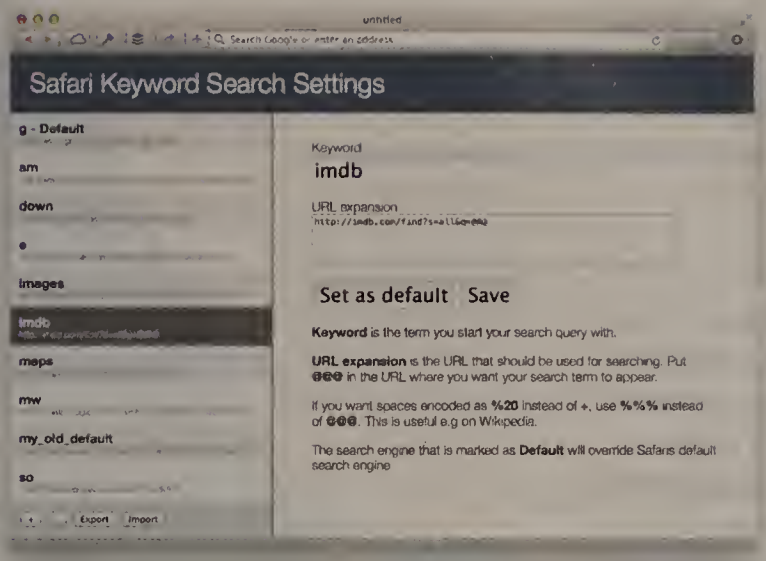
PRODUCTIVITY

# Safari Keyword Search 2.2.5

★★★★½; donation requested; Arne Martin Aurlien; safarikeywordsearch.aurlien.net

Sometimes I want to search a specific site—say, IMDb or Wikipedia. It seems like a waste of time to have to go to the desired site, find its search box, and type my search query. Luckily, a third-party utility lets me do all that right off the bat.

Safari Keyword Search is an extension for Safari 5.1 or later that mimics a feature found in Chrome and Firefox: You can define keywords that allow you to search particular sites right from Safari's unified URL/search field. The extension is free, though the developer requests a donation if you find it useful.




Say I want to look up some information about the actor Sean Connery. I could type his name into Safari's search bar, let Google load the results, and then click on the Wikipedia page (presumably near the top of the hits) for Sean Connery. Or I could type `w Sean Connery` into the URL field and be taken right to his Wikipedia page. (*W* is Safari Keyword Search's abbreviation for a Wikipedia search.) The process is unobtrusive and efficient.

Safari Keyword Search comes with a dozen keywords for popular sites, including Wikipedia, IMDb, Amazon, Wolfram Alpha, YouTube, and eBay. You can create your own shortcuts by finding and isolating the search string for any site. For example, I've created a shortcut (*mw*) that performs a Google search only of the Macworld.com website.

Overall, Safari Keyword Search is one of those great pieces of software that enhances a daily routine while staying out of your way until you want it.—DAN MOREN

# iOS Central

The Latest on the iPhone, iPod Touch, iPad, and App Store

## The iPad Air

Apple's thin, light, full-size iPad delivers the goods.

**BY JASON SNELL**

**Review**

RATING
4½

PRICING
$499–$799 (Wi-Fi only, with 16GB–128GB of storage); $629–$929 (Wi-Fi + cellular)

COMPANY
Apple

URL
apple.com

It's right there in the name: The iPad Air's most important trait is its 1-pound weight. Apple obsesses over making devices thinner and lighter, so it must have been a relief to make an iPad that's better *and* smaller than its predecessors.

Most aspects of the iPad Air are thinner and lighter, including the smaller and less capacious battery. Battery *life*, though, is about the same, thanks to the improved power efficiency of the iPad Air's A7 processor.

But besides getting thinner and lighter, the iPad got more powerful. That A7 chip enables the iPad Air to run about twice as fast as the previous-generation iPad, opening the door for new apps that can bring laptop-strength power to the tablet.

### A Familiar Look

The iPad Air takes its design cues from the iPad mini, which Apple introduced a year ago. The bezel around the iPad's screen has been reduced in height and (quite dramatically) in width. Like the mini, the Air comes in two color choices: a white front with a silver back, or a black front with a dark gray back. Also like the mini, the Air ignores stray thumb touches on the display next to the narrow bezel. I've never had a problem holding the iPad mini by its bezel and I had no trouble on the iPad Air either.

The iPad's display remains unchanged from the previous two models: At a resolution of 2048 by 1536 pixels (264 pixels per inch), it's a Retina display, so named because most people can't discern the individual dots that make up the image. The iPad Air also has the 4:3 aspect ratio that all iPad models (and old-fashioned TV sets) use, giving it a less extreme rectangular shape than competing tablets that use the widescreen 16:9 aspect ratio.

The Air comes with a headphone jack, a Lightning connector port, a SIM slot (on cellular models), and two microphones to improve audio when you shoot videos or video-chat via FaceTime. As before, the rear-facing camera is a 5-megapixel unit; but Apple slightly upgraded the front-facing camera, introducing a backside-illuminated sensor to improve image quality in low-light FaceTime sessions.

At the bottom of the iPad Air, on either side of the Lightning connector, are two stereo speakers. I found their volume to be roughly the same as on the previous-model iPad, but the sound seemed a bit fuller. The two speakers are placed so close together that it's difficult to notice much stereo effect from them.

### Two Hands Are Better Than One

A year ago, I stopped using my full-size iPad and switched to an iPad mini, entirely because of the mini's small size and light weight. The iPad Air, with its thinness and lower weight, alters that equation. But I don't foresee an exodus of users from the mini to the Air. The coming iPad mini with Retina display (see page 26) will upgrade the mini's display and internals, and the Air can't match it as a one-handed device.

PHOTOGRAPHY COURTESY OF APPLE

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If you long to read an iPad for hours on end while holding it in one hand, the iPad Air isn't for you. I could hold it in one hand for a while (especially in portrait orientation, thanks to the device's narrower width) but it was never as comfortable as an iPad mini for reading. Though it's far more comfortable to use than earlier full-size iPads, it still works best when held in two hands, propped up by another part of your body, or laid flat on your lap.

The decreased width of the iPad Air makes thumb-typing in portrait orientation easier than it was on previous models. I could type with my thumbs on the normal iPad software keyboard without any ungainly stretching, and with a decent amount of speed. Still, for top speed I prefer to put the iPad Air on my lap and use the larger software keyboard that's available in landscape orientation.

The iPad Air's screen is large and truly gorgeous. I read a lot of comic books on the iPad, and the Air's screen shows them in all their glory; on the iPad mini, they feel a bit too small. When I scanned an issue of *Hawkeye* in the Comixology app, the screen showed off numerous artwork details, and the comic's colors popped.

## Fastest iPad Ever? Of Course

An A7 processor, the same chip that Apple uses in the brand-new iPhone 5s, powers the iPad Air. It's a fast, 64-bit processor that blows the processor used by earlier-model iPads out of the water.

On the Geekbench speed-test app, the iPad Air was faster than even the iPhone 5s. (The iPad Air's A7 runs a little faster than the iPhone's, owing to its larger battery and possibly its greater ability to dissipate heat.) The Air was almost twice as fast as the fourth-generation iPad. So in a year Apple has almost doubled the speed of the iPad and iPhone. Not bad.

The iPad Air also aced the two Web-browsing tests we tried: the Peacekeeper HTML 5 test and the Sunspider JavaScript test. Results were similar to those on the Geekbench tests, coming in at nearly double the speed of the previous iPad, and slightly faster than the iPhone 5s.

## Options and Buying Advice

Deciding to buy an iPad Air is only the beginning: You have 16 models to choose from. And once you pick a color scheme (white/silver or black/gray), you'll need to settle on storage and networking features.

Apple is offering four different storage options, ranging from 16GB to 128GB. You'll pay an extra $100 for each doubling of storage space. These days I have a hard time recommending the 16GB model to anyone. I bought a 16GB iPad mini last year and almost instantly regretted it; my wife has a 16GB third-generation iPad, and she has made me swear that we'll never buy a 16GB model again. It might provide enough storage for very light use, but if you're reading this review I suspect you are not a casual-enough user to settle for the 16GB model.

As with all previous iPad models, Apple is offering a cellular-capable version of the iPad Air for a $130 premium over the Wi-Fi–only model. If you are going to use your iPad only at home and in other places where Wi-Fi is readily available, you have no reason to pay that premium. Otherwise, however, the cellular Air model is worth considering. It supports pretty much every format of cellular service; and since the SIM card slot is unlocked, you can switch carriers and even buy a prepaid SIM card when you're roaming internationally.

No contract commitment is required, and carriers offer aggressively priced pay-as-you-go plans. In the United States T-Mobile even offers 200MB of monthly data for free. And an iPad makes a great wireless hotspot, so you can connect other devices (such as your laptop or an internationally roaming smartphone) via Wi-Fi. Since there's no ongoing commitment, you're effectively paying an extra $130 up front for the freedom to switch on cellular data when you're in need. If you travel with your iPad and have experienced the frustration of being unable to get online, the option could make sense for you.

The iPad Air's screen is large and truly gorgeous. I read a lot of comic books on the iPad, and the Air's screen shows them in all their glory.

## Bottom Line

The iPad was already the best large tablet out there. If it had any deficiencies, they had mainly to do with weight and size, and that's where the iPad Air shines. It still has a battery that will last for 10 hours, and now it's twice as fast as it was before, opening the door for even more apps that can boost personal productivity or just entertain you that much faster.

It's right there in the name: The iPad Air is still an iPad, but it's lighter and smaller and twice as fast to boot. If you want a tablet you can comfortably hold in one hand, look elsewhere. Otherwise, look no further than the iPad Air.

**On Display** The iPad Air (left) adopts the mini's narrow bezel.

# Apple Introduces New Retina iPad Mini

The latest iPad mini comes with a Retina display—and other improvements to its feature set.

BY DAN FRAKES

At its October 22 media event, Apple announced a new iPad mini with Retina display, with much-anticipated upgrades to its screen, processor, cameras, and more.

### New iPad Mini With Retina Display

For starters, the new iPad mini with Retina display ups its screen resolution from 1024 by 768 pixels to Retina quality (2048 by 1536 pixels) at the same 7.9-inch (diagonal) screen size. This change increases the iPad mini's pixel density from 163 pixels per inch to 326 ppi—nearly that of the iPhone 5s.

The new mini gets some upgrades on the inside, as well. Whereas the original mini used the same dual-core A5 processor, at the same clock speed, as the two-and-a-half-year-old iPad 2, the new iPad mini line significantly bumps up its horsepower by using Apple's 64-bit A7 processor, similar to the one in the iPhone 5s. Apple senior vice president of worldwide marketing Phil Schiller says that the new processor makes the Retina iPad mini up to four times as fast as the previous model on processor-intensive tasks, and up to eight times faster on graphics-intensive tasks. Like the new full-size iPad, the iPad mini with Retina display also features Apple's M7 motion coprocessor, which can monitor the device's various motion sensors (accelerometer, compass, and gyroscope) without having to wake the main processor.

The new mini gains upgraded wireless capabilities, too, thanks to dual Wi-Fi antennas and support for MIMO (multiple input, multiple output) technology. Apple says this change allows the new iPad mini to communicate at up to twice the bandwidth: 300 megabits per second. Cellular-equipped versions of the new iPad mini also have expanded LTE capabilities, so they can work on more LTE networks around the world.

Apple upgraded the iPad mini's cameras slightly. Though their resolution (5 megapixels for the rear camera, and 1.2 megapixels for the front FaceTime HD camera) hasn't changed, the new iPad mini gains larger pixels and improved backside illumination sensors for capturing better low-light photos. In addition, the A7 processor's improved image-signal processing should provide better overall camera performance.

The new iPad mini line significantly bumps up its horsepower by using Apple's 64-bit A7 processor, similar to the one in the iPhone 5s.

Since Apple doesn't publish a spec for RAM in the iPad mini, we'll have to wait for the inevitable teardowns to learn that figure. iFixit's teardown of the original iPad mini revealed 512MB of RAM.

Apple says that the new iPad mini with Retina display offers 10-hour battery life, as the original iPad mini did. Accomplishing this feat while adding the extra power drain of a Retina display seems to have required Apple to increase—ever so slightly—the size and weight of the new iPad mini. The new version is exactly the same height (7.87 inches) and width (5.30 inches) as the original mini, but it's a tiny bit thicker (0.30 inch compared to 0.28 inch) and a little bit heavier: 0.73 pound versus 0.68 pound for the Wi-Fi model, and 0.75 pound versus 0.69 pound for the Wi-Fi + Cellular version.

The iPad mini with Retina display is slated to be available in silver/white or space gray/black by the time you read this. The Wi-Fi versions cost $399 for 16GB, $499 for 32GB, $599 for 64GB, and $699 for 128GB—a first in that capacity for the iPad mini. Cellular versions add $130 to each of those baseline prices.

### Original iPad Sticks Around

Meanwhile, the original 16GB Wi-Fi iPad mini is now priced at $299, down from $329, and the Wi-Fi + Cellular version now comes in at $429. Apple now offers the original iPad mini in space gray or silver, rather than black or white.

Both iPad mini versions (Retina and non-Retina) ship with iOS 7 installed; and you can download Apple's iLife and iWork suites for iOS for them free of charge.



**Small Wonder** The new iPad mini adds a Retina display to its spec list.

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# Apple's Touch ID: It Isn't Bulletproof, but It's Still Very Useful

Hacked or not, Apple's fingerprint technology is well worth using.

BY MARCO TABINI

**Sleight of Hand** Security researchers fooled a Touch ID sensor with a fake fingerprint.

In late September, a group of German security researchers announced that they had circumvented Apple's Touch ID—the technology behind the iPhone 5s's fingerprint scanner—by fooling the sensor on their brand-new handsets into accepting a fake fingerprint that they had photographed at high resolution, printed out, and transferred to a piece of latex.

The success of this trick raises questions about how effective Touch ID is at keeping data secure from malevolent crooks. But don't assume the fingerprint-based security system is useless.

The idea behind using fingerprints to unlock your phone is that they tie your data to a unique physical identifier. Unlike a password, which someone may guess or crack without knowing anything about the user, fingerprints can't be reproduced without access to the original.

But fingerprints are supposed to work alongside passwords, not replace them. That way, hackers who guess your password still won't have the required fingerprint. For added security, you could couple a fingerprint (something you are) and a password (something you know) with a third item you keep with you, such as an access card or a device for receiving SMS messages (something you own).

## A Limited Problem

Given how easily the German researchers fooled the iPhone's fingerprint sensor, it would be a simple matter for a thief who had physical access to your surroundings to take a picture of your prints and use them to unlock your phone.

But even if thieves unlocked your phone with a fake fingerprint, they'd have to maintain control over your iPhone long enough to siphon out its information or (at the very least) long enough to alter your iCloud password to access your backups, calendars, and email accounts. Since your iPhone is rarely far from your hands and pockets, you would probably notice its absence quickly—and run to the nearest computer to disable it via Find My Phone.

True, this security arrangement doesn't protect you from, say, a jealous spouse or a determined private investigator; but such people usually have easier means at their disposal to acquire your information, such as accessing your home computer after you've gone to work, or calling your cellular carrier and talking a customer rep into faxing a copy of your last bill.

Touch ID was built not for people who have to deal with *Mission: Impossible*–style intrigues, but for people who are vulnerable mainly to thefts by unsophisticated criminals—crooks who see snatching a smartphone in the street as easy, low-risk, and potentially lucrative.

Passcodes are a good solution to this problem, but they're inconvenient—so much so that, according to a recent McAfee survey, fewer than one-third of users enable them. Touch ID, on the other hand, is quite convenient, and its futuristic appeal makes it fun to use; consequently many users may, for the first time, protect their data with some level of security.

## Marketing Gone Awry

Apple hasn't done a very good job of explaining Touch ID to the public. Instead of promoting it as an alternative to passcodes, the company should have marketed it as an alternative to using no security at all—which is what most users have chosen as their data-protection mechanism of choice.

In practice, Touch ID delivers enough safety for most of us. It may not be as good as a 15-character password, but it's probably superior to a four-digit passcode, and it's far better than nothing at all.

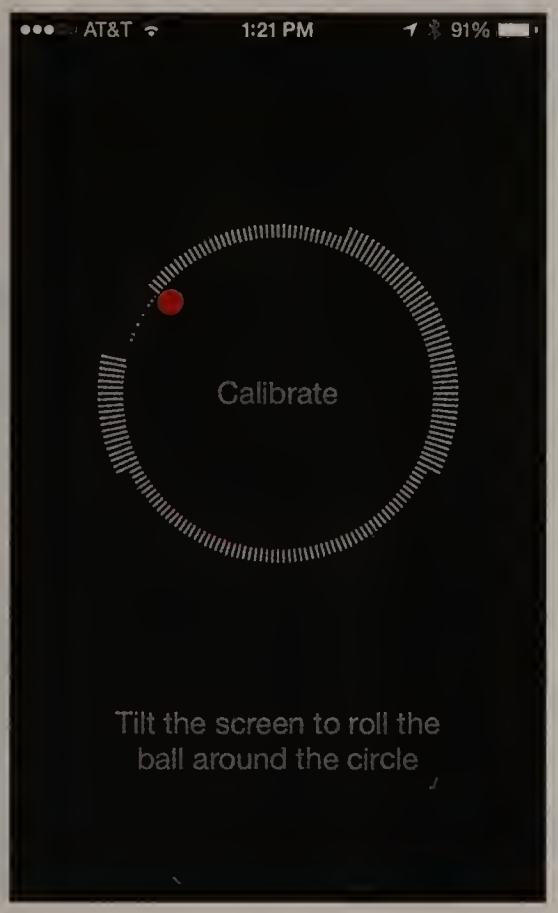
> Touch ID was built for people who are vulnerable to thefts by crooks who see snatching a smartphone in the street as easy, low-risk, and potentially lucrative.

# iOS 7.0.3 Fixes Two Major Bugs in Mobile OS

BY SERENITY CALDWELL

Apple has pushed iOS 7.0.3 to iOS devices everywhere. The update adds support for iCloud Keychain and fixes an accelerometer-calibration issue that some users were seeing, as well as recent iMessage bugs.

The update addresses several major complaints. For starters, the lock screen won't display 'slide to unlock' when Touch ID is in use; Wikipedia and Web search have returned to Spotlight; and Accessibility's Reduce Motion option now minimizes both animation and motion.




iOS 7.0.3 also improves iWork system stability; quells a voice-quality issue with Siri and VoiceOver; patches a lock-screen bypass; and fixes several bugs in VoiceOver, Bold Text, and supervising software.

You can get the update via the Software Update screen in *Settings* → *General* on an iOS device running iOS 7 or later. View the update's security content on Apple's site (go.macworld.com/ios703).

# AT&T Makes Shared Data Plans Mandatory

BY JARED NEWMAN

AT&T now requires all new customers to sign up for its Mobile Share plans, which allow unlimited voice and text, but also establish a ceiling for data usage that applies to all devices on the plan.

AT&T customers with traditional plans that set monthly ceilings on voice minutes and text messages, and separate ceilings on data usage for each device, can keep their existing plans, upgrade or downgrade their plans, and buy new phones without being forced onto Mobile Share.

Shared data plans are worth looking into if you need more than the basic amount of voice minutes and text messages. But if you need more data instead of unlimited voice and text, Mobile Share isn't a great fit. AT&T's basic Mobile Share plan starts at $70 per month with just 300MB of data. On the soon-to-be discontinued individual plan, the same $70 would buy you 3GB of data and 450 voice minutes. Each text message would cost an extra 10 cents.

Mobile virtual network operators such as Virgin Mobile (with plans starting at $35 per month) and Ting (which charges only for what you actually use) are a possible alternative; but if you use one of them, you have to pay full price for a new smartphone.

# What's New at the App Store

### Fotor HDR

If you'd like to create cool-looking still photos, the $2 Fotor HDR (go.macworld.com/fotorhdr) app for iPhone is pretty nifty: For a single photo, it captures two pictures—one overexposed and one underexposed—and then combines them into a single image to create eye-popping high-dynamic-range photos. The app includes presets and filters that allow you to create engaging images and share photos easily on social media.—JOEL MATHIS

### Yahoo Mail

Believe it or not, Yahoo Mail (go.macworld.com/yahoomail2) still exists—and Yahoo recently relaunched its iOS app as version 2.0. Among the improvements: Conversations are now threaded, you can personalize the app with custom themes, and 1TB of storage lets you save every message you've ever received or ever will receive.—JOEL MATHIS

### Shadowrun Returns

The $10 Shadowrun Returns (go.macworld.com/shadowrun) features a *Blade Runner*–meets–*The Hobbit* story line: Elves and dwarves haunt a dystopian cyberpunk future ruled by fearsome corporations. Your character is a mercenary who gets jobs done (use Batman voice here) "by any means necessary."—JOEL MATHIS

### SlowCam

SlowCam (go.macworld.com/slowcam) records videos at high frame rates so you can play them back in slow motion. The updated app introduces support for the iPad and the iPad mini, and adjusts automatically to use the maximum frame rate that the iOS device you're using allows.—JOEL MATHIS

# App Guide

Software for Your iPhone, iPod Touch, and iPad

## Infinity Blade III

GAMES The first Infinity Blade was an infinite loop of challenge, punishment, and reward. It was fun to play because it delivered all the crucial elements of a typical RPG in its dungeon setting, and pruned everything else.

While Infinity Blade III (go.macworld.com/infblade3) is more graphically polished than ever and adds various peripheral elements to the gameplay, it lacks big new ideas.

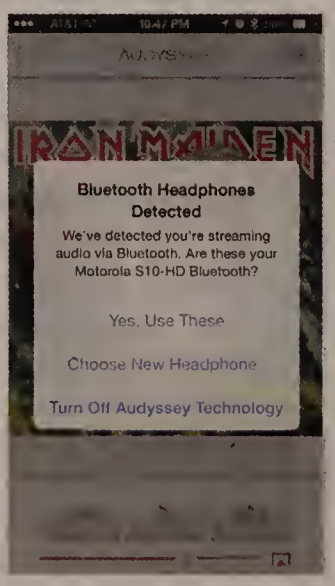
Infinity Blade III does introduce a new category of opponent—the dragon—and the ability to play as a second character, a brunette with a crossbow. Unfortunately, she shoots everyone when she meets them, leaving you to take over for the subsequent sword fight.

Infinity Blade III looks great and plays well, but the gameplay mechanics are getting a little tired. Series veterans might want to look for something a bit more original.—DAVID PRICE

iPhone/iPad/iPod touch | ★★★★; $7; Chair Entertainment Group

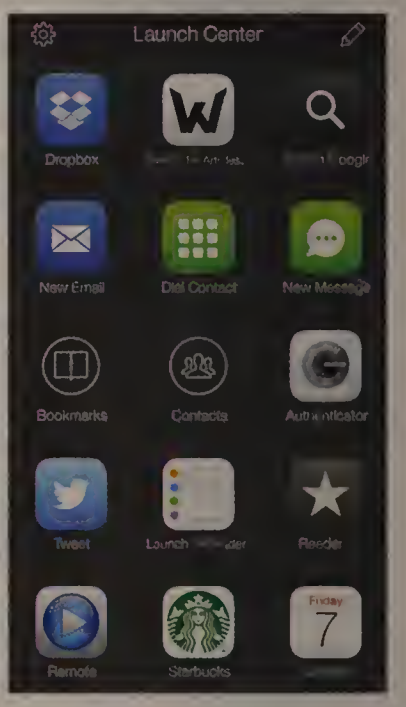
## Audyssey Media Player

AUDIO A simple audio enhancement app, the Audyssey Media Player (go.macworld.com/audysseymp) has fairly spartan music-player functions. Its claim to fame is a database of presets for 250 or so headphone models, optimized to suit the unique features of each. The app also gives you two ways to increase or decrease treble and bass levels. Audyssey is a nice set-it-and-forget-it app—if your headphones are in its database. —BRIAN BEAM




iPhone/iPad | ★★★★; $1; Audyssey Labs

## Launch Center Pro 2




UTILITY On the surface, Launch Center Pro 2 (go.macworld.com/lcp2) is a speed dialer for apps. It requires iOS 7 and is compatible with all iPhone and iPod touch models that support that OS.

Once you've set up actions to suit your needs, Launch Center makes everything from browsing the Web to placing a phone call more efficient without making it more complex: You tap to jump straight to what you want to do.

Almost all of your normal interaction with Launch Center Pro takes place in its main screen. You activate an action by tapping it or by tap-swiping into a group, and the corresponding app launches. For certain tasks, the software prompts you to type some text first, but its UI is built for quick access.

Even if you aren't big on customizing your mobile device, having access to so much functionality from one interface can speed up your work with the device. And everything happens from the comfort of a single app.—MARCO TABINI

iPhone/iPad/iPod touch | ★★★★½; $5; Contrast

## Pivvot for iOS

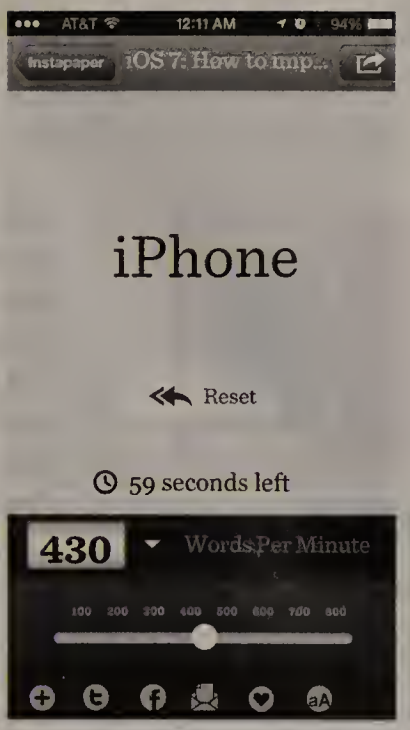
**GAMES** A "game of strategic avoidance," Pivvot (go.macworld.com/pivvot) challenges you to maneuver a ball tethered to a winding track by tapping the screen's sides to avoid obstacles that could shatter the ball.

Pivvot emphasizes spatial awareness and tests your reflexes, reaction time, and patience with unexpected obstacles that suddenly pop up just around a corner. The game features smooth, minimalist graphics and a groovy soundtrack that keeps rhythm with the levels.

Voyage mode essentially introduces you to the game's various challenges. Endless mode dares you to keep the ball intact for 100 seconds as the winding track speeds up. Completing those two levels unlocks the corresponding expert levels. And beyond them lies the exceedingly difficult Berserk level.

All in all, Pivvot makes for an exasperatingly addictive good time.—YISHIAN YAO

iPhone/iPad | ♦♦♦♦; $3; Whitaker Trebella




## ReadQuick

**UTILITY** Like Velocity (below), ReadQuick (go.macworld.com/readquick) aims to help you overcome subvocalization and read faster. It follows a similar approach, too, flashing words one at a time on your iOS device.

ReadQuick lets you browse some popular blogging sites directly. It connects to Instapaper and Pocket, and it works even if you don't have a paid Instapaper subscription.

I especially like the app's display of an estimated completion time for each article based on reading rate. ReadQuick also has the advantage over Velocity of being optimized for both iPhone and iPad.—BRIAN BEAM

iPhone/iPad | ♦♦♦♦; $5; Action Now

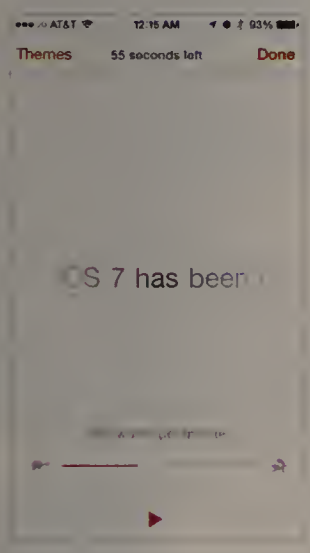
## LouderLogic

**AUDIO** A throwback to the good old days of skeuomorphic design, LouderLogic (go.macworld.com/louderlogic) gives you additional music-playing features and increases your device's audio quality.

The app overlays a graphic-equalizer graph on the album art. You can adjust the settings either by tapping the EQ button (which controls the bass, midrange, and treble mix) on the iPad or by turning your iPhone or iPod touch onto its side to get a more traditional EQ graph with the familiar pulsing bars along the audio spectrum.

If you like to fiddle with precise controls, you'll want the $4 universal version of the app. An ad-supported, iPhone-only version is free.—BRIAN BEAM

iPhone/iPad | ♦♦♦♦; $4; McDSP




## Velocity

**UTILITY** Lickability's Velocity (go.macworld.com/velocity) helps you read online content faster by getting you to stop subvocalizing (silently sounding out words as you read). According to Velocity's short tutorial, the average person reads at a speed of about 200 words per minute, which is about how fast humans speak. Supposedly, subvocalization restrains your brain's ability to process written text at a much faster rate.

Velocity presents written text one word at a time on your iPhone, iPad, or iPod touch. The app initially displays words at around 250 wpm and then increases that speed, enabling you to outpace your inner voice so your brain can process the text faster. Like other read-it-later apps, Velocity strips nonessential content from webpages. It provides a scaled-down Web browser for browsing and saving pages, too.

If you're looking for an inexpensive tool to help you read large amounts of content faster, Velocity can do the job; and though it isn't iPad-optimized, it looked fine on my iPad at 2X resolution.—BRIAN BEAM

iPhone/iPad/iPod touch | ♦♦♦♦; $3; Lickability

# Reviews

Accessories and Add-ons for Your iOS Devices

Hardware

## Apple iPhone 5s Case

★★★★; $39; Apple; apple.com

Apple's case for the iPhone 5s (which fits the iPhone 5, too) is a rigid shell that covers the phone's back and sides, but leaves its screen exposed. Available in brown, beige, black, yellow, light blue, and Product Red, the case has a soft-leather exterior and sports a recessed Apple logo on the back. Soft microfiber covers the inside rear of the case.

Apple's case weighs just 13 grams (less than 0.5 ounce) and adds only about 4mm to the width and height of the iPhone 5s or 5—and even less to its thickness. The phone feels bigger with the case on, but not at all bulky or heavy.

The case extends a bit past the screen in front, forming a lip that protects the screen when you place the phone face-down. And because the edges of the case don't wrap around the front, the lip won't interfere with touches, drags, and swipes near the edges of the screen. The case doesn't offer substantial padding, but it should handle most incidental bumps and drops.

The leather's matte texture adds a bit of grip to the phone without making the handset difficult to remove from your pocket. It looks quite nice, and the leather doesn't scratch if you look at it wrong, as all too many leather phone cases do.

Apple's iPhone 5s Case offers decent protection in a minimalist design. It fits perfectly, and it has an attractive look and feel. And at $39, it's also reasonably priced, so you won't regret buying Apple's case right out of the gate.—DAN FRAKES

## Apple iPhone 5c Case

★★½; $29; Apple; apple.com

This silicone cover slips over your iPhone 5c, protecting the back and sides while leaving the screen exposed. A small ridge ringing the front of the phone keeps the screen from coming into direct contact with surfaces, and a microfiber lining inside the case prevents your 5c from getting scuffed.

The case is available in six colors—pink, yellow, blue, green, white, and black—but all seem a bit muted.

A grid of 35 holes adorns the back of the iPhone 5c Case, offering a glimpse of the iPhone case beneath.

Unfortunately, when I tried to push a slightly distended strip of silicone into place on the case, it snapped, leaving me with a torn case after just a few days of not particularly torturous use.—PHILIP MICHAELS

## Braven BRV-1 Waterproof Portable Bluetooth Speaker

★★★★½; $150; Braven; braven.com

The BRV-1 carries an IPX5 rating, meaning that it can withstand rain, splashes, and jets of water, though not full immersion. It comes in black with a blue or gunmetal finish, and has a 3.5mm audio-in jack for connecting a non-Bluetooth source, though using that jack entails opening a waterproofed port at the back, thus reducing its water resistance.

Sound quality is excellent, even at high volumes, with remarkably deep bass and no distortion. It's also surprisingly loud—a definite advantage over most compact speakers.

## iOS Devices: Current Lineup

| PRODUCT | SPECS | RATING | PRICE [1] | DISPLAY | MORE INFO |
|---|---|---|---|---|---|
| iPad Air [2] | 16GB | Wi-Fi, ★★★★½ | Wi-Fi: $499; Wi-Fi and cellular: $629 | 9.7-inch color (Retina) | go.macworld.com/ipadair |
| | 32GB | Wi-Fi, ★★★★½ | Wi-Fi: $599; Wi-Fi and cellular: $729 | 9.7-inch color (Retina) | go.macworld.com/ipadair |
| | 64GB | Wi-Fi, ★★★★½ | Wi-Fi: $699; Wi-Fi and cellular: $829 | 9.7-inch color (Retina) | go.macworld.com/ipadair |
| | 128GB | Wi-Fi, ★★★★½ | Wi-Fi: $799; Wi-Fi and cellular: $929 | 9.7-inch color (Retina) | go.macworld.com/ipadair |
| | 16GB (iPad 2) | ★★★★½ | Wi-Fi: $399; Wi-Fi and cellular: $529 | 9.7-inch color | go.macworld.com/ipad2 |
| iPad Mini | 16GB | Wi-Fi, ★★★★ | Wi-Fi: $329; Wi-Fi and cellular: $459 | 7.9-inch color | go.macworld.com/minirev |
| | 32GB | Wi-Fi, ★★★★ | Wi-Fi: $429; Wi-Fi and cellular: $559 | 7.9-inch color | go.macworld.com/minirev |
| | 64GB | Wi-Fi, ★★★★ | Wi-Fi: $529; Wi-Fi and cellular, $659 | 7.9-inch color | go.macworld.com/minirev |
| iPhone 4s, 5c, and 5s | 8GB 4s[3] | ★★★★ | Free | 3.5-inch color (Retina) | go.macworld.com/iphone4s |
| | 16GB 5c[4] | ★★★★ | $99 | 4-inch color (Retina) | go.macworld.com/iphone5c |
| | 32GB 5c[4] | ★★★★ | $199 | 4-inch color (Retina) | go.macworld.com/iphone5c |
| | 16GB 5s[4] | ★★★★½ | $199 | 4-inch color (Retina) | go.macworld.com/iphone5s |
| | 32GB 5s[4] | ★★★★½ | $299 | 4-inch color (Retina) | go.macworld.com/iphone5s |
| | 64GB 5s[4] | ★★★★½ | $399 | 4-inch color (Retina) | go.macworld.com/iphone5s |
| iPod Touch 5th Generation | 16GB | ★★★★ | $229 | 4-inch color (Retina) | go.macworld.com/touch516 |
| | 32GB | ★★★★½ | $299 | 4-inch color (Retina) | go.macworld.com/touch5 |
| | 64GB | ★★★★½ | $399 | 4-inch color (Retina) | go.macworld.com/touch5 |

n/a = Not available. [1]All prices are Apple's prices. [2]Separate Wi-Fi-and-cellular iPad models are available for AT&T's network and for Verizon's. [3]This phone is available only with an AT&T plan. [4]These models are available with an AT&T, Sprint, or Verizon plan.

The BRV-1's internal battery is good for 12 hours of continuous playback, and you can use the included Micro-USB cable to charge that battery. Another option is to use the BRV-1 to charge other devices via USB—the speaker has enough juice to power music players and phones, though not tablets. (Doing this will, of course, reduce the speaker's playback time.) Along with its diminutive dimensions and light weight (just a little over 12 ounces), these features make the BRV-1 an excellent choice for backpacking or camping trips.—MARCO TABINI

## Double Robotics Double

♦♦♦½; $2499; Double Robotics; doublerobotics.com

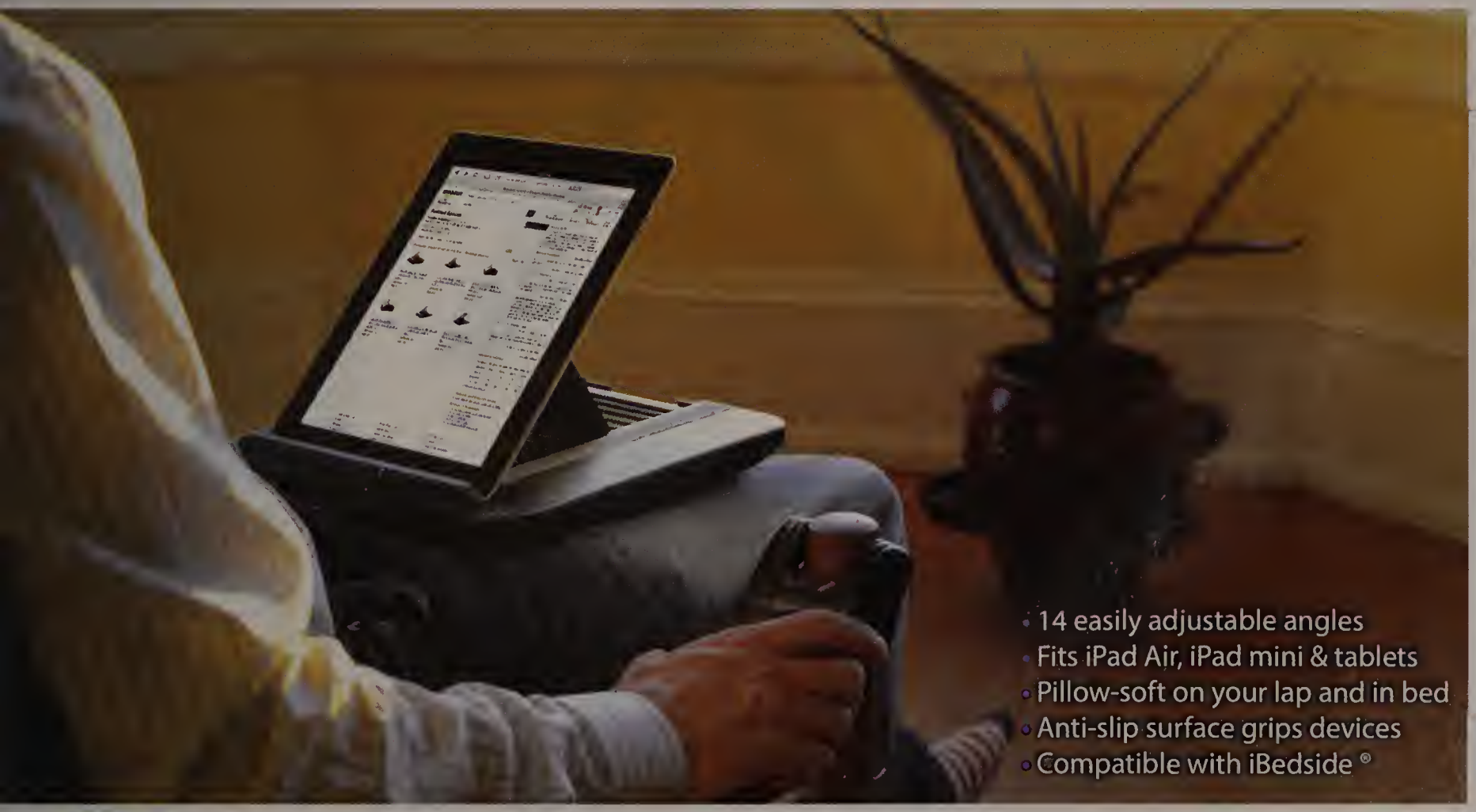
A telepresence robot that works with the iPad, the Double is essentially an iPad stand on wheels. The "head" offers a snug fit for a full-size iPad that you provide. The iPad connects to the Double via Bluetooth, and the iPad's camera and microphone supply both video and audio to the controller.

The Double Robotics server is the hub for commands and video flowing to and from the controller. Video is encrypted through the WebRTC 128-bit AES encrypted video standard.

In less than 10 minutes, I was up and running with the Double—the setup was so easy, I was afraid I had missed something. To control the robot, you need another iPad or an iPhone and the free iOS app for iPhone or iPad, or you can use Web-based controls via Google Chrome. You tap the up and down arrows to go forward and backward, and tap the left and right arrow buttons to turn left and right.

Because the controls are so simple, driving the Double is a lot of fun, though performing pinpoint movements such as moving between two objects does take some practice.

With its ease of use and relative affordability, the Double could serve a worker's occasional telecommuting needs nicely.—ROMAN LOYOLA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THE INSIDER'S GUIDE TO

# OS X Mavericks

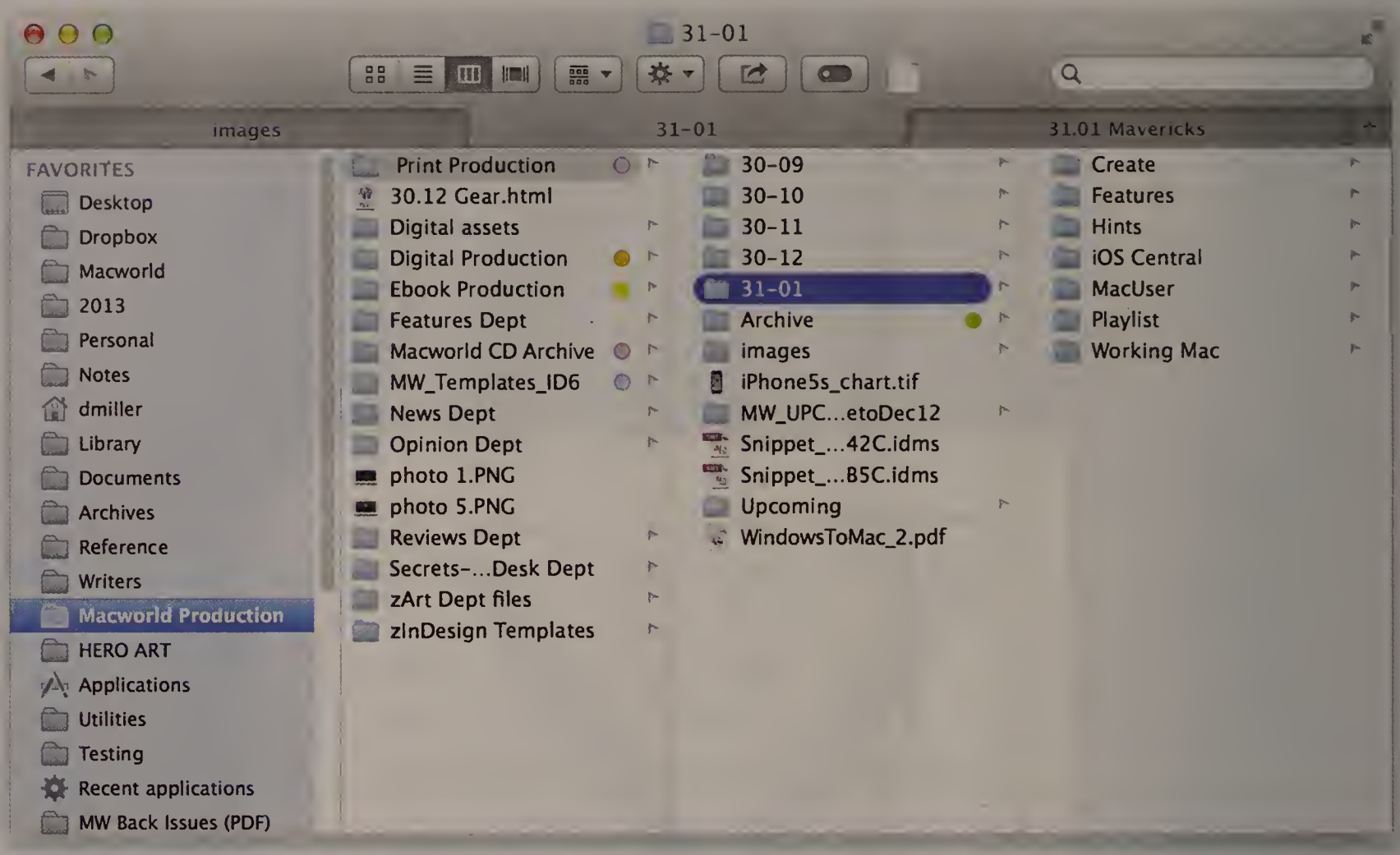
## Everything You Need to Know About the Latest Mac OS

The last time Apple released an OS X update for free, it was playing defense. OS X 10.0 was slow and buggy and adoption was sluggish; version 10.1, which rolled out in September 2001, was an apology release for the pioneers who were running Apple's then-new Mac operating system.

Twelve years later, Apple's playing offense. OS X Mavericks (technically version 10.9) launches a new era of Mac operating systems, complete with a non-feline nickname and a blank price tag. It's free, whether you're running Snow Leopard or Lion or Mountain Lion, and just as with the company's many free iOS updates, Apple wants you to upgrade.

So I can't tell you whether or not to spend your hard-earned money on this upgrade, because, well, Mavericks won't cost you a penny. But here's how I see the highs and lows of this new update.

BY JASON SNELL




# Finder Tabs—Finally!

Recent releases of OS X have sought to minimize the amount of time users have to spend managing files in the Finder. From the Dock to Spotlight to Launchpad, Apple has invested a lot of effort in offering Finder alternatives.

And yet, Mavericks offers new features that are positively Finder-centric. For all of Apple's attempts to allow users to bypass the Finder, it's not going anywhere, so it might as well be improved.

Web browsers used to feature separate windows for every webpage. At some point, someone decided that window clutter was bad, and that it might be easier to allow several pages to be contained in a stack of tabs inside a single window. A revolution was born, one that has made it all the way to the Finder with Mavericks.

**OS X MAVERICKS**

**COMPANY:** Apple; apple.com

If all you do in the Finder is double-click things, you'll never actually see a tab. Double-clicking a folder in the Finder opens it in the same window. If you want to open a folder in a new tab, hold down the <Command> key while double-clicking. You can also type <Command>-T to open a new tab manually. If you end up with a whole lot of Finder windows open, you can gather them all together as a series of tabs in one window by choosing *Merge All Windows* from the *Window* menu.

Each tab behaves like its own Finder window, so you can adjust the view settings of each one accordingly. Once you've got multiple tabs open, you can move files from one tab to another by dragging and dropping them on a tab.

The addition of tabs in the Finder seems like a feature that's destined for power users, not the masses. No regular user is ever going to <Command>-click a folder and discover tabs, and that's probably fine. As for me, I'm still getting used to it.

## Tag Your Files

Though Mavericks brings new features to the Finder, it's not as if Apple has recanted the view that users shouldn't need

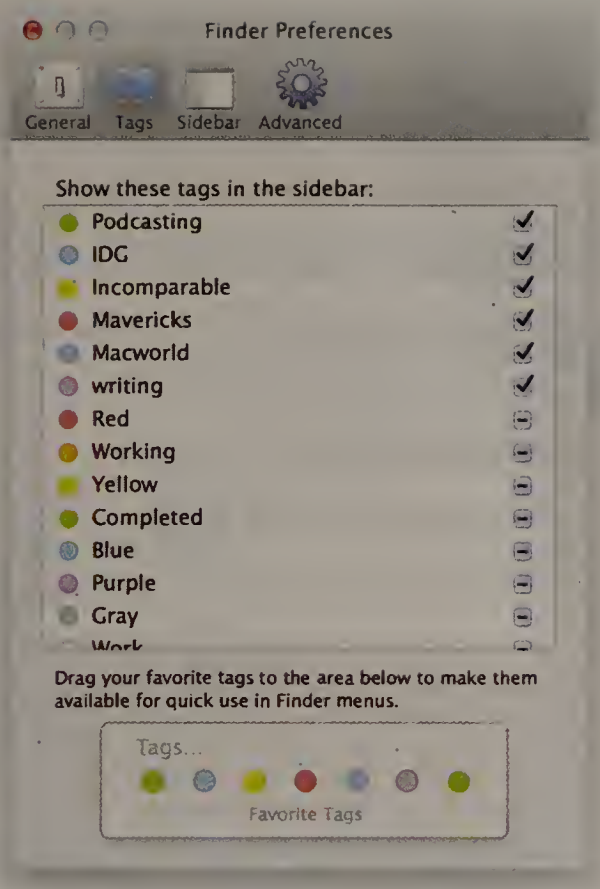
to dig through files and folders to find what they're looking for. Spotlight already makes it easy for users to find files based on their attributes or content, and with Mavericks, Apple is encouraging users to categorize their files further by using tags.

Tags are a simple, arbitrary method of categorizing information. On a blog, you might add a bunch of tags to every post to indicate its subject matter. This has the benefit of letting users quickly find all the blog posts about a particular subject. With Mavericks, Apple wants you to consider tagging your files so that they're easier to find later.

In the sidebar of every Finder window, there's a new Tags list. Click a tag, and you'll immediately see all of the files on your Mac that have that tag. A small subset of your tags is listed by default, but if you click *All Tags*, a second column appears that lists every tag on your Mac. And if you start typing a tag in a Finder window's search box, you'll see an option to search for files containing that tag.

In an evolution of the old concept of colored labels, there are also ways to identify tagged files visually in the Finder. In the new Tags tab of the Finder's Preferences window, you can assign colors to tags and also choose which tags show up in the sidebar.

The Tags tab also offers a strip of circles that you can drag and drop tags on, which determines which tags show up in the File menu and in a contextual menu that appears when you <Control>-click an item in the Finder.




**TAG IT**
The new Tags tab gives you lots of power, but it can be a bit confusing.

The addition of tabs in the Finder seems like a feature that's destined for power users, not the masses.

You can add tags to a file when it's born by adding them when you first save a document. In every standard Save dialog box in Mavericks, a new Tags box resides immediately below the text-entry field where you name your file. To tag your file, just click in the window. First you'll be presented with a drop-down menu featuring common tags, as well as a Show All link to display all the tags on your Mac. You can click items from that list to pick them, or just start typing.

If you're typing a tag that already exists, a suggestion will appear below as you type. You can click the suggestion to accept it. If you're typing a completely new tag, just select *Create New Tag* when you're done.

Once you start adding tags, Mavericks remembers the tags you've previously created and offers them as autocomplete suggestions. Once your file is all tagged up, click *Save*. That's it.

You can also add tags to any file or folder via the Finder. A new Tags icon on the toolbar of every Finder window lets you add tags to any items you've got selected. You can also use the list of tags in the sidebar of every Finder window to tag items. Just drag items on top of one of the tags in the sidebar to add that tag to those files.

Though adding tags in the Finder is a pretty easy process, it does require a lot of mousing around. I'm disappointed that there's no keyboard shortcut to bring up the tagging interface.

All of us have different ways of organizing our data. With tagging, Apple has provided Mac users with another organizational option. It won't be for everyone, but I'm betting that some users will embrace it wholeheartedly.

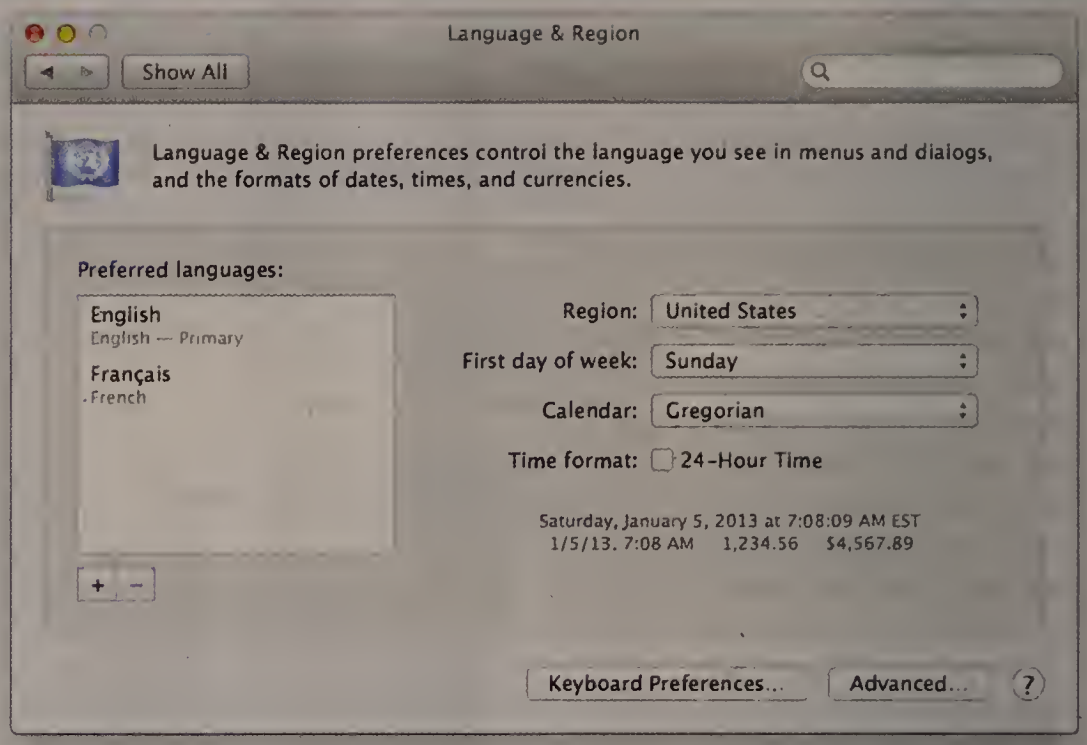
**SHOW ALL**
You can opt to view all files that have a particular tag.

# Changes in System Preferences

The first thing you'll likely notice, if you've spent a decent amount of time in the System Preferences utility in the past, is that the icons for the individual preference panes are slightly larger, and Apple has updated some of those icons, such as the one for iCloud.

The second change in appearance is that while System Preferences still organizes individual preference panes into rows, it no longer displays the category names that were included in earlier versions of OS X: Personal, Hardware, Internet & Wireless, System, and Other.

Several of the panes remain the same as they were in OS X Mountain Lion: Desktop & Screen Saver; Dock; Printers & Scanners; Network; Sharing; Users & Groups; Date & Time; Startup Disk; and Time Machine. The other panes have undergone changes large and small.




**PLAIN AND SIMPLE**
Apple has dramatically simplified the Language & Region pane.

## General

In OS X 10.8 and earlier, when enabling LCD font smoothing, you could opt to have the OS disable smoothing for fonts smaller than a specified size, presumably because smoothing didn't always work well at small font sizes. In Mavericks, this option is gone—font smoothing is either on or off for all font sizes.

## Mission Control

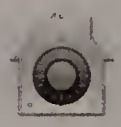
You get one new option here: Displays Have Separate Spaces. With this option enabled, you can set up separate workspaces for each display.

## Language & Region (Language & Text in OS X 10.8)

Apple has completely revamped this pane in Mavericks. Instead of getting separate tabs for Language, Text, Region, and Input Sources, you now choose your preferred languages, region, first day of the calendar week, calendar type, and time format in a single screen.

Unlike in OS X 10.8 and earlier, which displayed all languages—you were limited to rearranging the order of preference—in Mavericks you choose only the languages you actually use.

Where did the rest of the settings formerly in the Region tab go? At the bottom of the window is an Advanced button that reveals settings for formatting dates, times, and numbers.



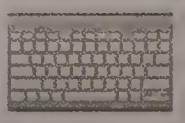
## Security & Privacy

In the General tab, the Disable Automatic Login option is gone. And the Require Password After pop-up menu no longer offers a 4-hour option—1 hour is the longest delay. The Privacy tab, where you configure which apps have access to system services, now adds Calendars, Reminders, and Accessibility.

## Notifications

This pane for managing Notification Center includes a couple major changes. The first is a new iOS-style Do Not Disturb option. Select this, and you can choose particular times and conditions during which you wish to disable notifications.

The second change is that each service's or app's notification preferences contain a new option: Show Notifications On Lock Screen. When you've enabled this setting for a service or app, notifications appear on your Mac's lock screen.



## Keyboard

The Keyboard tab remains the same, while the tab previously named Keyboard Shortcuts is now simply Shortcuts; the old Keyboard & Text Input category has been renamed Keyboard. There are also two new tabs in Mavericks. First, the Input Sources tab contains settings that were previously located in the similarly named tab in OS X 10.8's Languages & Text pane. (There's one exception: Mountain Lion's Input Source Options is gone.)

Second, the new Text tab contains the settings previously found in the Text tab of

OS X 10.8's Languages & Text pane. Missing is the Word Break option, and the text substitutions list no longer shows all the default snippets and symbols provided in OS X 10.8. The reason for the change is that—starting in Mavericks—your substitutions list automatically syncs with the text-shortcuts list found in Settings > General > Keyboard under iOS 6 and iOS 7. Under the new arrangement, anything that you add to this list in the Text tab syncs to your iOS devices, and vice versa.

### iCloud

Instead of a single Calendars & Reminders item, you now see separate items, Calendars and Reminders. The Documents & Data item, when enabled, now has an Options button. Click it to see a list of apps that store data in iCloud. There's also a new Keychain entry. Enable this option to use the new iCloud Keychain feature in Mavericks and iOS 7.

### Internet Accounts (Mail, Contacts & Calendars in OS X 10.8)

This pane's new name better reflects the various settings it hosts. With the addition of Twitter and Facebook integration in Mountain Lion, the Mail, Contacts & Calendars designation was a little confusing.

In addition, when configuring a new account, you'll see Google listed. You also get the option to add a LinkedIn account.

### Bluetooth

Mavericks gives this pane a considerable makeover, with the aim of making it easier to understand. You no longer have to click the plus (+) button to initiate a new Bluetooth-device pairing. Instead, any Bluetooth device in range of your Mac appears here with a Pair button next to it; you just click that button to pair your Mac with it. Gone is the old Sharing Setup button, as well as the Discoverable on/off toggle (your Mac automatically becomes discoverable whenever you open the Bluetooth pane). Absent, too, are a few options in the Advanced-options screen such as Reject Incoming Audio Requests.

### Parental Controls

The only significant change here is a new option in the Other tab to disable use of a Mac's built-in camera, a camera built into a connected display, or a USB camera.

**SECURED ACCESS**
The Privacy tab lets you approve app access for your personal data.

### App Store (Software Update in OS X 10.8)

The big change here is a new option for automatically downloading and installing updates to apps purchased from the Mac App Store.

### Dictation & Speech

A new option called Use Enhanced Dictation, when enabled, downloads nearly 800MB of data that allows you to use of OS X's dictation feature offline, along with continuous dictation and live dictation feedback.

### Accessibility

The new Accessibility pane looks much the way it did in Mountain Lion. It's organized into two panes, with the left pane broken into three categories: Seeing, Hearing, and Interacting. However, there are a number of new groups of settings here.

**Captions:** You use the new Captions settings to control how subtitles are styled and whether your Mac should give preference to closed captions. You have three basic styles to choose from: Default, Classic, and Large Text. If you click the plus button in the Captions screen, you can create your own caption style.

**Switch Control:** New under the Interacting head is Switch Control, which lets you control your Mac using one or more switches, which could include a mouse, keyboard, or a gamepad.

**Accessibility and security:** Apps such as Smile's TextExpander and Many Tricks' Moom and Witch all rely on Accessibility settings on your Mac. The preference to allow apps to access these features has moved in Mavericks.

To find Accessibility, go to *System Preferences* > *Security & Privacy* and click the *Privacy* tab. Then scroll down to Accessibility, and drag into the list any apps that you would like to grant such permission to.—DAN FRAKES

# Safari: Sidebar, Top Sites, Speed

Mavericks brings a new version of Safari, which offers a new Sidebar, a redesigned Top Sites page, performance improvements, plug-in management, and a new feature designed to remember your passwords without compromising security.

The Mountain Lion version of Safari offered three features that you could access via buttons on the far left side of what it called the Bookmarks Bar: Reading List, Bookmarks, and Top Sites. Safari 7's newly rechristened Favorites Bar features only two: Sidebar and Top Sites.

## New Favorites

The Sidebar is the new home of Bookmarks, Reading List, and the new Shared Links feature. It's a gray bar that lives on the left side of the browser window. To open it, click the book-shaped Sidebar icon on the Favorites Bar, choose *View → Show Sidebar*, or press <Command>-<Shift>-L.

In previous versions of Safari, going to the Bookmarks view replaced the contents of your browser window with a bookmark editor, where you could drag and drop bookmarks and rename them. That window is still there if you choose *Edit Bookmarks* from the *Bookmarks* menu, though it's now a hierarchical view full of folders, instead of the old interface where different folders were in a separate sidebar of their own.

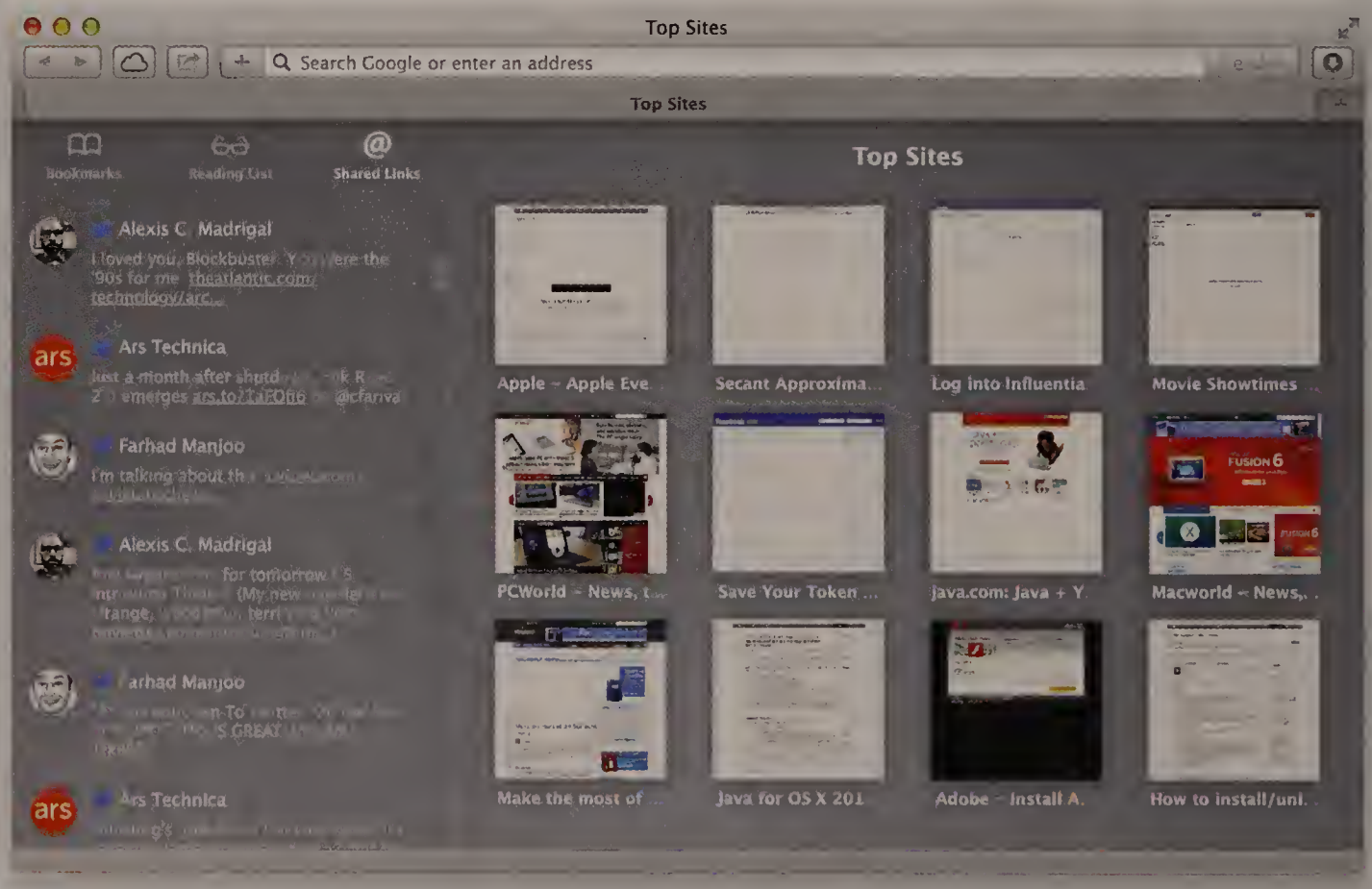
But in parallel, there's a new Bookmarks tab in the Sidebar that gives you one-click access to your bookmarks. Just click a bookmark in the Sidebar, and Safari loads that page on the right side of the same window.

The second tab in the Sidebar is Reading List, and it's not that different from the Mountain Lion version. This is still the place where you can collect pages on the Web that you want to read at a later time, even if you're offline. The big difference in Safari for Mavericks is that the Reading List scrolls endlessly. Once you're at the bottom of a Reading List story, just keep scrolling down and you'll be taken to the next story in the list.

In previous iterations of Safari, there were toolbar buttons to add stories to Reading List and add links to your Bookmarks. In Mavericks, Safari no longer provides those buttons. Instead, there's a big plus (+) button integrated to the Address and Search bar, just to the left of the page's URL. Click the plus button to add the page you're on to Reading List.

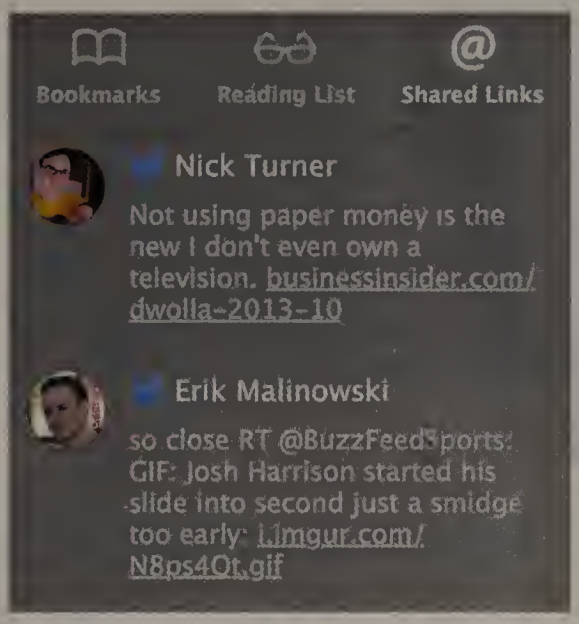
Now to the third (and most interesting) addition to the Sidebar: the Shared Links tab. Once you've logged in to a Twitter or LinkedIn account via the Internet Accounts pane in System Preferences, any posts that contain hyperlinks are displayed in the Shared Links list.

In the Shared Links sidebar, posts are displayed with the




**NEW SIDEBAR** Three different views are available in the new Safari sidebar.

most recent item at the top. They aren't bare links, either, you see the avatar of the person who posted the link, their name, an icon representing the service the post came from (just Twitter and LinkedIn are supported at this point), and the text of the post itself. Click anywhere on the post to display it in the browser window, and as with Reading List, if you keep scrolling to the bottom of the story, you'll be able to scroll right to the next story in the list.




**SHARED LINKS** Any posts that contain hyperlinks are displayed in the Shared Links list.

Safari has been able to remember your passwords for ages, but it will now also suggest a password for you.

Unfortunately, Shared Links' light-gray-text-on-darker-gray-background color scheme makes the text of individual posts hard to read, and there are no timestamps.

Next to the Sidebar button is the Top Sites button, and of course there's a new version of the Top Sites interface, which presents you with six or 12 or 24 of your favorite sites in a grid. I admit I never use Top Sites, but the look seems more modern, and drag-and-drop reorganization of Top Sites items is a no-brainer addition.

## Browser Plug-ins

Apple says that it has made improvements that make Safari faster, and more reliable and secure. (See page 46 for more.)

One major source of stability, speed, and energy consumption issues in Safari isn't Safari itself, but rather browser plug-ins such as Adobe Flash. Third-party tools like ClickToPlugin have let users manage whether webpages can load those plug-ins, and in Mavericks, Safari has a similar feature built right in.

The feature lives in the Security tab of Safari's preferences window, under the Manage Website Settings button. From here you can see every browser plug-in being used by your system and a list of sites that have loaded it. You can turn access on and off on a per-site basis, as well as set a default for what happens on your first visit to a website that's trying to load a plug-in. For example, you can set YouTube to load Flash, but all other sites to block it.

Safari also has a Power Saver feature that will sometimes prevent plug-ins from loading until you click, emulating ClickToPlugin's approach.

And when Safari is blocking a plug-in, the browser replaces the space occupied by the plug-in with an empty box. This happens because Safari is reporting to the Web server that it has the plug-in, but the browser doesn't display the content.

In general, I like that Apple is providing Safari users with this level of control over browser plug-ins. However, the implementation is kind of weird. Most users will probably not know the difference between Allow, Allow Always, and Run in Unsafe Mode, all of which are available as possible options on a per-website, per-plugin basis.

## Passwords in the Cloud

I've been a user of 1Password for a few years now, and I love it. I just have to remember a single master password, and 1Password remembers all the rest of them.

Mavericks offers a new feature called iCloud Keychain that, in true Apple fashion, addresses some of the basic needs addressed by utilities such as 1Password while leaving plenty of room for add-on tools that go beyond what Apple offers.

iCloud Keychain stores your passwords, credit card numbers, and personal contact information and syncs them between devices. Since it's all synced via iCloud, it should all stay in sync across your iOS 7 devices; so if you save a password on your Mac, it'll be there when you next visit that site on your iPad. Pretty cool.

iCloud Keychain enjoys some major advantages over utilities like 1Password, in that it can integrate directly in the browser (rather than via an extension) on the Mac. Passwords and usernames fill in automatically when you visit a page, so you don't have to click around like you do with 1Password. And in iOS, the advantage is greater: 1Password can't fill passwords into Safari at all (you have to either browse with the 1Password app or retrieve your password from there and then paste it into Safari), while iCloud Keychain is integrated directly into the iOS Safari browser (assuming you've updated to iOS 7.0.3).

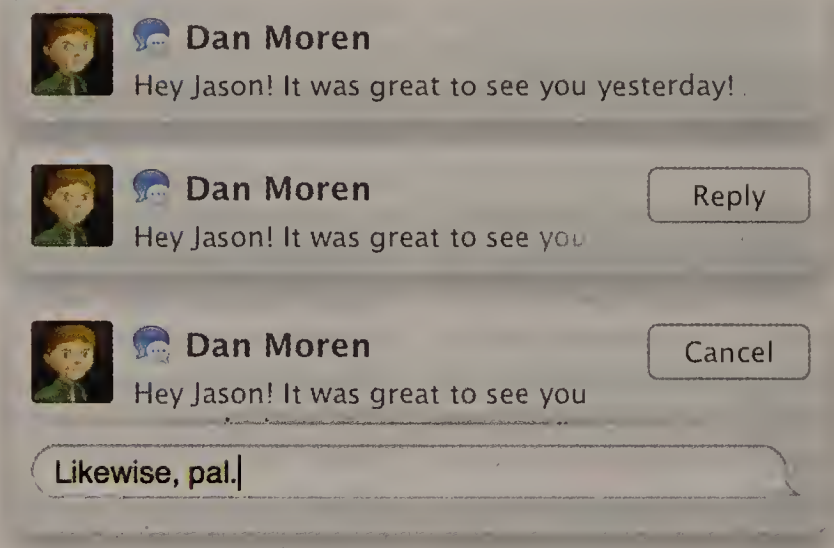
Safari has been able to remember your password for ages now (only the syncing part is new), but it will now also suggest a password for you when you're prompted to create one. Then Safari will save the password in the keychain, so you don't have to remember it. Safari can also remember your credit card info and automatically fill it in (well, most of it—it won't store your card's security code).

A problem with emphasizing autofilling of passwords is that when a Mac is running and unlocked, someone could use Safari to log in as you. If you're worried, you should set your Mac to automatically lock when it goes to sleep or when the screensaver activates. I'd prefer an option that required me to enter a password to unlock my iCloud Keychain. You can set the Mac's normal keychain to lock after a period of inactivity, but the iCloud Keychain can't be set to auto-lock. That seems like an oversight.

# Notification Center Turns Interactive

In recent years, Apple has shown a predilection for improving OS features in their second iterations—think Time Machine and FileVault. With Mavericks, it has done the same for Notification Center. But while the result is more useful, it still doesn't feel as organized.

Notification Center has two manifestations: floating notification bubbles that appear on your screen when you need to know something, and a notifications list that slides out from the right side of your screen when you click the Notifications icon. In a year of using Mountain Lion, I have come to appreciate the floating bubbles, but I've rarely, if ever, used the sidebar list.

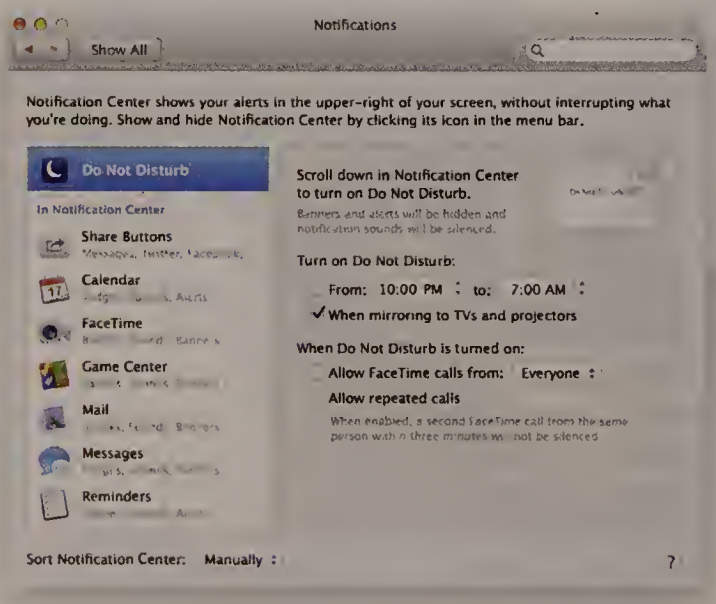



## Notification Bubbles

In Mavericks, those bubbles have become much more useful, mainly because they're now more interactive. When you receive a missive in Messages, for example, you can reply directly from the bubble: Click the *Reply* button, and the bubble expands to reveal a text area. Type a reply and press <Return> to send it. There's similar functionality when it comes to Mail alerts: You can reply directly from the notification bubble or delete the message. Incoming FaceTime calls are likewise heralded by a notification bubble.

**DIRECT REPLY**
Mousing over a notification bubble reveals a Reply button.

Since Mavericks includes the option to automatically update your Mac App Store apps, Notification Center also now alerts you about apps that have been updated, and warns you if an update requires you to quit an app or restart your system. Some other system alerts have moved into Notification Center, as well: Warnings about a dying battery or a failed Time Machine backup that would previously have spawned a big warning box instead create a Notification Center bubble.




**NOTIFICATIONS LIST**
Clicking the Notifications icon on the menu bar slides out the sidebar.

I set my Mac to automatically lock when I put it to sleep. When I wake the Mac up but before I log in, Notification Center now displays basic information about things that have happened since I went away, including any email alerts.

This might be handy, but it could also be a security flaw, as someone could view sensitive information without entering a password. Fortunately, the Notifications pane in System Preferences now lets you lock this down: App by app, you can decide which notifications display when your Mac is locked. I would, however, prefer an option that would globally prevent such notifications.

## Notification Sidebar

I don't use the Notification Center sidebar very often; it's usually full of old junk and gives me no way to filter or quickly clear it. I wish it was better organized and took a broader overview of what was going on. It provides too much information, and I find myself accidentally triggering it via inadvertent trackpad swipes.

But one thing I do like in the new Notification Center is the ability to send instant messages from within it. Just as you can reply to a message directly from within the notification bubble, you can start a conversation with a friend by clicking the *Messages* icon at the top of Notification Center. This seems like a great idea, especially for people who don't keep Messages open all the time.

# OS X's Clean New Look

Apple's latest updates to both iOS and OS X have largely banished skeuomorphism—design elements that imitate real-world counterparts. Much like iOS 7, Mavericks strips out those gaudier elements of past designs and flattens faux-3D textures. Here are some of the visual changes you will likely notice.

## Leather Be Gone

According to legend, Steve Jobs so admired the leather texture of the seats in his private jet that he demanded Apple's designers incorporate such a texture into the Calendar, Contacts, and Notes applications. Though we love his vision for most things, Jobs's obsession with soft Corinthian leather is one we're happy to see fade away in Mavericks.

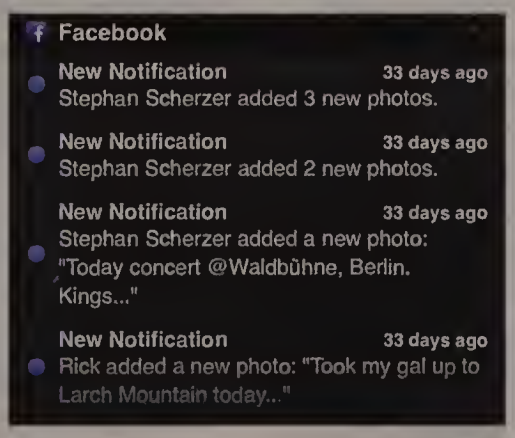
Not only has the leather border disappeared, but you'll also no longer find faux binding stitches holding your address book together in Contacts. Without all the skeuomorphic elements, the application now has room for a title bar, which displays the number of contacts within the selected group. And Notes loses its torn-paper border at the top of each note as well as the small hieroglyphics-like trash icon at the bottom of each note—because presumably we all understand the function of the Mac's <Delete> key.

## Clean Linen

Though the Corinthian leather was perhaps the most prominent texture in Lion and Mountain Lion, another was lurking about: dark linen.

That subtle pattern of white and gray threads appeared in the background of Notification Center, Mission Control, and even OS X's Accounts window. But no more. Where once you saw linen, now you have dark gray.

Apple's designers also introduced some less noticeable textures. If you compare Mavericks's DVD Player to the one found in Mountain Lion, for instance, you'll find that controls such as Video Zoom, Video Color, and Audio Equalizer have become less transparent than their Mountain Lion counterparts. The Dashboard background was once littered with Lego-like dots; it's now a smooth gray. And certain icons in System Preferences are flatter, having lost their metal texture of old.




**NEW TEXTURE**
The dark linen background has given way to simple dark gray.

**VISUALLY BETTER**
We're happy to see the leather go away in OS X Mavericks.

## Not Dead Yet

While Apple has made some substantial moves away from skeuomorphic design in Mavericks, it hasn't banished the look entirely. Visit the Applications folder, and you'll still find application icons that parrot their purpose: A tabbed address book still represents Contacts; Image Capture still sports a point-and-shoot camera; Reminders still resembles a checklist; and TextEdit hasn't lost its pen or its inspirational (and marketable) words from John Appleseed.

More-blatant examples also remain. Launch Game Center—and whoa!—the polished wood and green felt textures remain prominently on view. And if you're interested in seeing how our ancestors in the early 2000s rendered wood, grass, marble, metal, and fur (complete with reflections, in most cases), simply launch the venerable Chess application.—CHRISTOPHER BREEN

# Multiple Screens That Really Work

The Mac OS has always tolerated users with more than one display, but it has never truly embraced them until Mavericks. If you frequently use more than one display on your Mac, Mavericks will be a serious upgrade to your Mac experience.

My main Mac is an 11-inch MacBook Air, which I dock to a Thunderbolt Display when I'm at the office. With earlier versions of OS X, I just ran the laptop in lid-closed mode, but the new multiple-screen features in Mavericks make me want to leave that second screen on.

OS X Lion added support for full-screen apps and coalesced all of its window-management features into one place—Mission Control. These features were nice for people with one screen, but users who worked with multiple displays were left out. If you popped an app into full-screen mode on one monitor, the other monitor went blank, displaying only a stock linen pattern. All spaces encompassed both displays, too, so when you switched between spaces, the content on both displays changed.

With Mavericks, Mission Control behaves *exactly* as I had dreamed it would on multiple displays. Each screen can act independently, with its own space and its own full-screen mode. If you pop the Calendar app into full-screen mode on a laptop's screen, the calendar window expands to fill that screen, but the external display remains fully functional.

Each screen can have its own collection of full-screen apps and its own sets of desktops. When the Calendar app is displaying in full-screen mode on my laptop screen, I can move my cursor to that screen and swipe with three fingers to switch to other views. I can switch to a desktop view, another full-screen app, or even the Dashboard. (Yes, Dashboard still exists!) As I swipe from screen to screen on my laptop, the external display remains blissfully still, showing me all my other stuff. As it should be.

If you really prefer the old arrangement, you can still have spaces remain constant across your displays, thanks to an option in the Mission Control preference pane.

## No Monitor? No Problem

Not everyone has the luxury of owning a display to pair with their laptop or iMac. But with Mavericks, if you have a TV and an Apple TV, you can still have an external Mac display. While Mountain Lion introduced AirPlay Mirroring—the ability to display the contents of your Mac's screen on an HDTV connected via Apple TV—Mavericks lets you just treat that TV as a full-on second display.

Making the connection isn't much different from how AirPlay Mirroring works in Mountain Lion. If you're on a local network containing Apple TVs, an AirPlay icon shows up in the menu bar. You can select an Apple TV from the menu, and choose to mirror your current display or extend the desktop. (If you're running both an external display *and* an AirPlay display, you can also opt to either have the same screen mirrored on all three of them or have the AirPlay display mirror one of the other displays.)

Running in extended-desktop mode, the TV becomes just another display. You can set an arrangement via the Displays preference pane, and then use

> Now each screen can have its own collection of full-screen apps and its own sets of desktops.

Mission Control to manage spaces and full-screen apps, and all the rest. (Apple says that AirPlay requires a second-generation Apple TV or later and a 2011-era Mac or later.)

The display being driven by an Apple TV does suffer a little bit from lag. As I moved my finger on my MacBook Pro's trackpad, the cursor responded, but it was definitely a little bit behind where I expected it to be. As a result, I moved the cursor much more carefully on the TV display and was careful not to overshoot and click in the wrong place.

The lag was much less than I expected, and I'd consider it usable, but it's noticeable. It was reminiscent of the lag I've experienced when I've used Air Display to turn my iPad into a second small external display. In fact, I was able to use the Air Server utility, which turns a Mac into an AirPlay server, to turn another Mac into a second display for my Mac running Mavericks. If you've got an old iMac around, you may be able to use this approach to turn it into a serviceable second display.

So far as I can tell, you can only use one Apple TV at a time as an external display, and you must have a "real" display connected as well.

## One Dock, Two Menu Bars

Up to now, the OS X menu bar was inviolate: There was only ever one menu bar. With Mavericks, though, each display can have its own menu bar, and each menu bar can feature the contents of the menu for a different app—for example, the TextEdit menu bar on an external display and the Maps menu bar on a connected laptop screen. The currently active app's menu bar looks like normal; the inactive app's menu bar is semi-transparent. When you switch displays or click on the currently inactive menu bar, their transparency (or lack thereof) swaps.

This is another win for the users of multiple monitors. Before now, even if you used a second monitor on your Mac, the menu bar would remain on the primary display, necessitating a lot of mousing back and forth unless you installed a quirky add-on menu utility like SecondBar.

There may now be many menu bars, but there's still only one Dock. But it gets around. When I move my cursor to an external display and start working in an app over there, the Dock remains where it was, on the first display. However, if I move my cursor to the bottom of the display (as if trying to summon a hidden Dock), the Dock slides out of view on my first display and slides into view on the second. If your Dock is set to auto-hide, this feature may end up feeling seamless.

A few other longtime Mac windowing conventions have changed with the introduction of these features. Most notable is the ability to place a window so that it straddles two displays; in Mavericks, as you drag a window from one screen to the other, it begins to fade away—and then reappears on the other display. No halvsies. If you miss this feature and want it back, you'll need to turn off independent spaces for each display, log out, and log back in. Once you're back to the old method, your windows *will* span multiple monitors as in days of old.

# Green Machines

Apple makes a lot of claims about Mavericks making MacBooks more energy-efficient, thereby extending battery life. The new App Nap feature regulates apps that are out of sight so that they aren't draining your batteries as they sit idling.

That sounds sort of scary, but at no point when I was using Mavericks did I feel I was delayed by a "napping" app that should have been awake. The changes that Apple has made are, to this user at least, completely invisible.

There are other power-saving features, too, including a lower-power video playback mode and a clever feature called timer coalescing that smooths out the tasks sent to your Mac's processor so that it can spend more time coasting in a low-power idle.

Our tests showed that Apple has indeed improved battery life in several scenarios. Three of our four battery-life tests showed clear improvements with Mavericks, most notably a video playback test that took advantage of the lower-power playback feature to eke out 18 percent more battery life. Tests like this are tricky because they don't necessarily match real-world usage patterns, but they do indicate that Mavericks can definitely reduce power consumption under certain circumstances.

One place where Apple is more aggressively exposing power-consumption information: In a drop-down menu under the Battery icon in the menu bar, you'll see a list of currently running applications that are "using significant energy." It's a quick way for a user to get feedback on why the battery is draining quickly or a laptop's fans are blowing. And the Activity Monitor utility—one of my favorite Mac troubleshooting apps—now offers a new Energy tab that shows you the energy impact of all the currently running processes on your Mac, plus historical data going back several hours. If you're desperately trying to get the most out of your battery, it's a great way to see what apps you might want to quit.

# Core Changes Boost Performance

OS X Mavericks has a lot of new features you can see. But Apple also took the time to implement several changes to the core of the OS that help the system run better overall. These under-the-hood changes boost performance and battery life.

## Timer Coalescing

Mavericks has some tricks up its sleeve that Apple claims will let users get more work done on a single battery charge.

Running processors drain battery life, so Mavericks tries to put the CPU into an idle state whenever possible. Powering the processor back up to a ready state also requires a significant amount of energy, so it's important to extend that power-sipping idle time long enough to provide a real reduction in energy use. But the problem is that most apps continually pester the processor to wake up and take care of housekeeping chores.

Timer Coalescing, a feature new to the Mac OS but used by Microsoft since Windows 7, aims to extend processor idle time by adjusting the timing of application calls so as to bundle several tasks and run them all at once instead of one at a time. The result is that the CPU makes better use of its time while at work, it has longer idle times, it spends less time waking up, and you enjoy better battery life.

## Memory Compression

Solid-state drives may be fast, but your Mac's RAM is much faster. That's why apps try to load their necessary data to the Mac's memory for quick and easy access to the bits and bytes they need most. But what happens when your Mac runs out of space in memory? When RAM space runs low, OS X Mavericks swaps data the Mac isn't currently using to virtual memory and moves the newly requested data into its place in RAM.

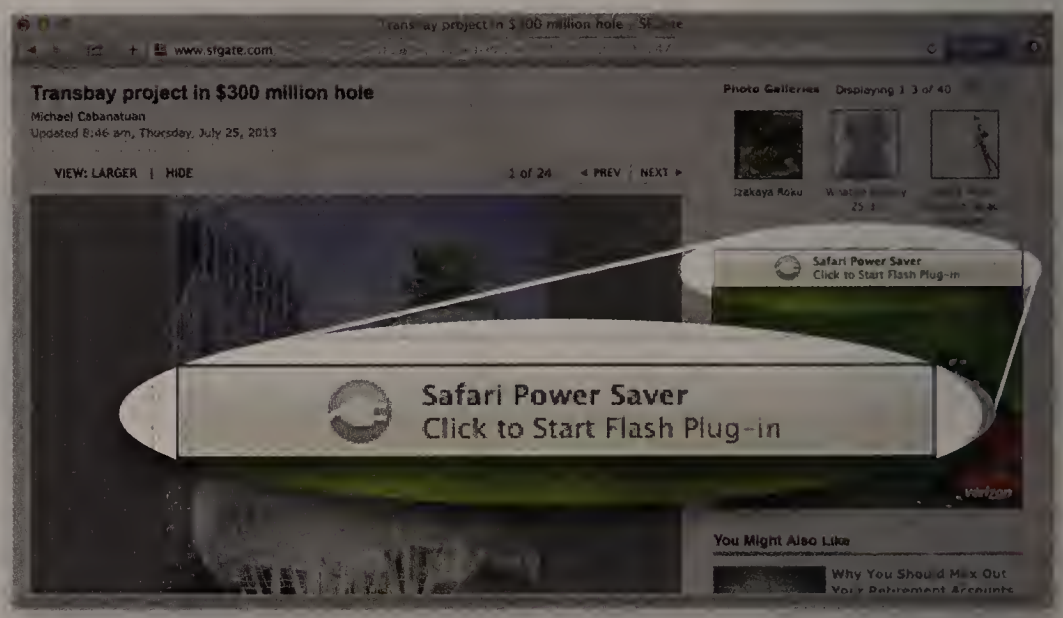
This data-swapping takes time, especially if the virtual memory resides on a hard drive, and it can result in sluggish performance. While adding RAM is an option for some Mac users, it can be costly—and on some Macs, you can't upgrade the RAM.

In Mavericks, Apple introduces Memory Compression, which is based on the concept that it's faster to compress and uncompress data residing in RAM than to transfer the data from memory to your drive and back. When applications try to load more data into RAM than your Mac has the capacity to accommodate, the OS compacts the least-used bits of data, so the data takes up half the room it did previously.

If you need that data again, Mavericks can quickly uncompress it and make it available. Not only should Memory Compression improve performance in memory-hungry applications, but it should also curb wear and tear on hard drives and SSDs.

## App Nap

An app that's open in the background may seem as though it's doing nothing when it's actually drawing on your Mac's hardware resources.




**SAVE POWER**
Safari has multiple power-saving features to preserve battery life.

You could quit the background apps, but that isn't always practical. So Apple developed App Nap, a feature that works behind the scenes to better manage the work that open apps are doing. App Nap senses when an app isn't doing anything and puts that app into a low-power state. Apple says that App Nap can reduce the amount of power that apps are using by as much as 23 percent.

## Safari Power Saver

Apple has tweaked Safari 7, which comes with Mavericks, to save battery life. The major change is Safari Power Saver, which, Apple says, reduces power usage during browsing by up to 35 percent.

Safari Power Saver prevents videos from playing automatically, and it has a power-saving feature similar to App Nap. Only the tab you're using runs at 100 percent; other tabs stay in an inactive mode.—JIM GALBRAITH AND ROMAN LOYOLA

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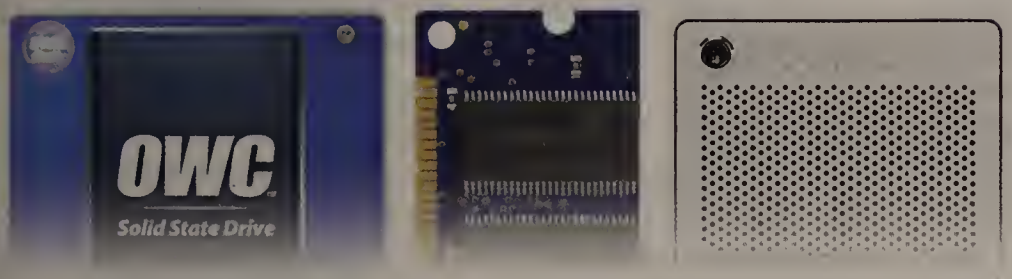
**by OWC Larry, Founder, Other World Computing**

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**Made in USA Tech Protects iPhone / iPad**

Although NewerTech NuGuard KX cases for iPhone and iPad are put together in China (there just isn't the support for this kind of manufacturing in the USA… yet). The space-age absorbing gel built into every mil-spec impact rated KX case is Made in the USA. The gel offers massive impact protection, 8X more energy absorption than competing materials, and allows for device survival with a 20 foot drop onto concrete, all in a slim one-piece design. ***www.macsales.com/kx***

**Unplanned Real-World Road Test**

I've owned an iPhone since day one, and have never left it on the top of my car, but hectic days being what they are, I left my KX protected iPhone 5 on the roof of my car and drove away. The nice person who returned it to me found it alongside a hill where I had to be going about 30mph, and my iPhone survived the drop in perfect condition. It can be hard to get excited about a case – but the KX is truly something!

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# Built-in Apps Get Upgrades

Mavericks comes with two new Apple apps as well as updates to a couple of familiar ones: Maps and iBooks are making their Mac premieres, and Mail and Calendar both get improvements.

## Mail

I used to use Mail every day, but it's most definitely a love-hate relationship and I've left it several times for other email clients, only to come back and give Apple's offering another go. That relationship continues to run hot and cold in Mavericks.

When I got Mail to behave, it was decidedly faster than previous versions. Opening large message threads used to take a long time, especially if they contained complex HTML messages. Everything opens quickly now and scrolls smoothly. That's great news.

I'm a Gmail user, and have two different Gmail accounts, one for my personal life and one for work. I've found that oftentimes Mail just slows down to a crawl, apparently because it's downloading huge amounts of data from Gmail in the background. Occasionally I would click a new message in my Inbox and it would take Mail more than 30 seconds to display the contents of the message. Call me crazy, but an email client should be able to prioritize the single most important thing any mail client can do: display the text of a new message that just appeared in the Inbox. Mail still doesn't seem to do this well, and the problem is exacerbated by slower connections.

I also ran into an infuriating setup bug in Mail. Though all of my email accounts are on Gmail, my attempts to connect to them via Mail's Google-centric account setup totally failed.

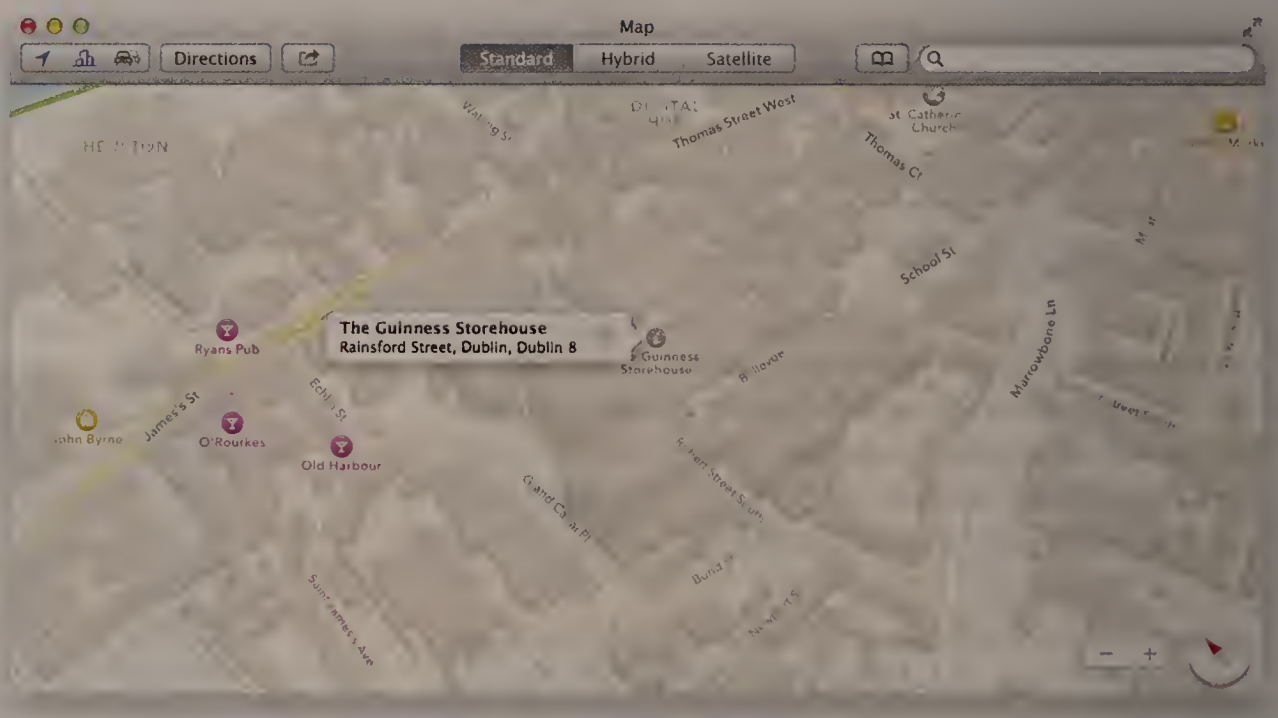
I had to configure my Gmail account as a generic IMAP account instead.

## Calendar

Calendar's biggest change is to its look. Gone is the faux leather. (For more on Mavericks' visual changes, see page 43.) But it also has some nice under-the-hood tweaks. For example, you can change the range of weekly and monthly views using a two-finger scroll. A fast two-finger swipe from right to left in the week view will advance you to the next week. Calendar also has a nice, subtle variation on that gesture: If you swipe slowly with two fingers from left to right, you can advance the view by individual days. A two-finger scroll upward in month view will, similarly, let you scroll week by week, so if you're at the end of one month, you can see most of the following month too.

Calendar's event inspector, which you summon by double-clicking on an entry, has been revamped. At last, you can specify a buffer of travel time in advance of an event; unfortunately, the Google Calendar with which my Calendar app syncs doesn't seem to want to display that information. The location field of the event inspector is also tied in to Apple's location database, so it will display map information and attempt to autofill your location information when you enter an

The Mac Maps app lays bare all of Apple's mapping and location data. It's best to describe it as the Mac version of the iOS app.




**FINALLY, IT'S HERE** The Maps app brings Apple's maps to your desktop at last.

event location. When calculating travel times, Calendar uses your locations to make guesses about how much time it will take to get from one place to another. Sometimes its guesses are good, sometimes not, but it's nice that the app is making the effort.

## Maps

The new Mac Maps app lays bare all of Apple's mapping and location data. Perhaps it's best to describe it as the Mac version of the iOS Maps app, because that's what it is. You can look up locations, see maps in 2D or 3D relief, view vector map illustrations or overhead photographic views, get directions, see live traffic—the works. I found Maps to be a bit easier to navigate than Google Maps, probably because it's a native app and can take advantage of the trackpad in some way that Google Maps can't, embedded as it is in a browser window. Zooming in and out and rotating the map via trackpad gestures all worked naturally.

## iBooks

iBooks has finally arrived on the Mac with Mavericks. (What took it so long?) Regardless, now Mac users can read not just ePub-formatted ebooks, but all the fancy multimedia books created in iBooks Author that were previously readable only on the iPad.

I'm not sure I'd ever choose to read a book on my Mac, but some of those enhanced iBooks Author books are multimedia extravaganzas that play really well on the Mac, sort of like the CD-ROMs of old. And as someone who also publishes ebooks, I know for a fact that many Mac users *do* want to read books on their Mac.

iBooks for Mac is a 1.0 product for sure, but I was impressed by some of the features it has that its competition still lacks.

For example, you can have iBooks not justify text and you can turn auto-hyphenation off as well. (Take that, Amazon!) It's exciting to see this last piece of Apple's digital-entertainment store ecosystem finally make it back to the Mac.

Mavericks isn't a visual rethinking of OS X in the way that iOS 7 was for iOS. It's a grab bag of tweaks, simplifications, advances made in lockstep with iOS, and improvements under the hood. It's hard to pinpoint a unifying message, so let's boil it down to the essentials. Mavericks is free, it's compatible with a lot of Mac hardware, and it makes the experience of using your Mac better in many ways. It's worth every penny you're not paying for it.

Take Pro Photos & Video Wherever You Take your iPhone or Galaxy S4

The idea behind the iPro Lens System is not to offer you another camera, but to enhance the one you already have – Your iPhone or Galaxy S4. Each lens easily bayonet mounts and lets you capture more in every shot.

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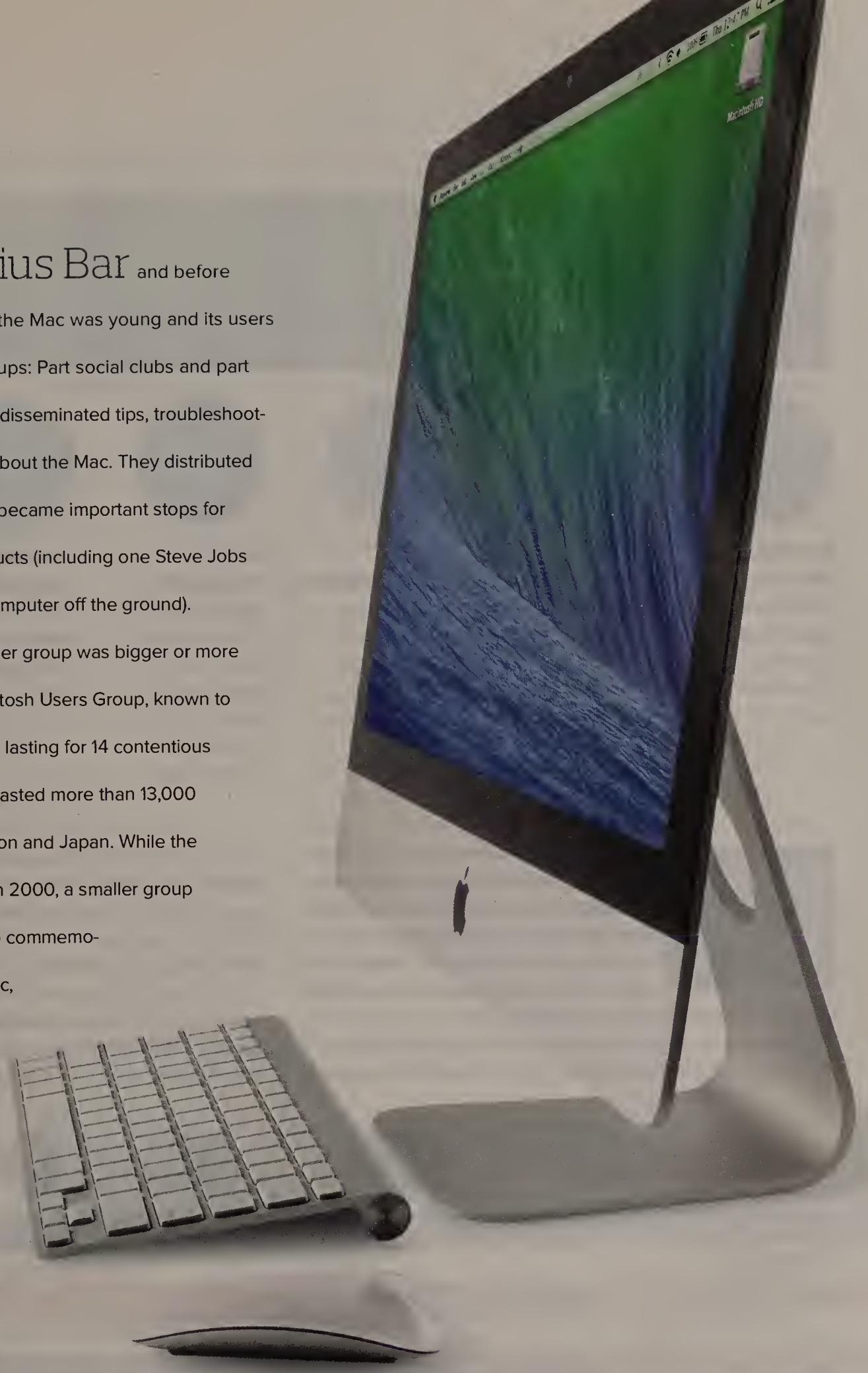
# There at the Beginning

# Before the Genius Bar and before

Apple's own online forums, when the Mac was young and its users needed help, there were user groups: Part social clubs and part volunteer tech-support staffs, they disseminated tips, troubleshooting advice, news, and arguments about the Mac. They distributed loads of early Mac shareware and became important stops for vendors promoting new Mac products (including one Steve Jobs when he was trying to get Next Computer off the ground).

And in that early Mac age, no user group was bigger or more important than the Berkeley Macintosh Users Group, known to all as BMUG. Founded in 1986 and lasting for 14 contentious years, it at one point reportedly boasted more than 13,000 users, with satellite groups in Boston and Japan. While the original group formally dissolved in 2000, a smaller group (BMUGWest) still meets. And so, to commemorate the 30th anniversary of the Mac, *Macworld* joined the group for dinner after one of its meetings and asked a few of the more senior members to look back over their three decades with the Mac.



As the Mac turns 30, we sit down with some of its earliest fans.

PHOTOGRAPHY BY ROBERT CARDIN

## Dramatis Personae

**RAINES COHEN**
**1984:** Student, UC Berkeley
**2014:** Regional organizer, Cohousing California

**RON HIPSCHMAN**
**1984:** Exhibit developer, Exploratorium, San Francisco
**2014:** Staff scientist, Exploratorium, San Francisco

**DAVID MORGENSTERN**
**1984:** Student, San Francisco State College
**2014:** Blogger, ZDNet; cantorial soloist

**DAVID SCHWARTZ**
**1984:** Radiotelephone operator, Pacific Bell
**2014:** Campus Shared Service IT department, UC Berkeley

**CAL SIMONE**
**1984:** Record producer
**2014:** Jungian coach, writer, public speaker

**DUANE STRAUB**
**1984:** IT department, Lawrence Livermore National Laboratory
**2014:** Campus Shared Service IT department, UC Berkeley

## How They Got Started With the Mac

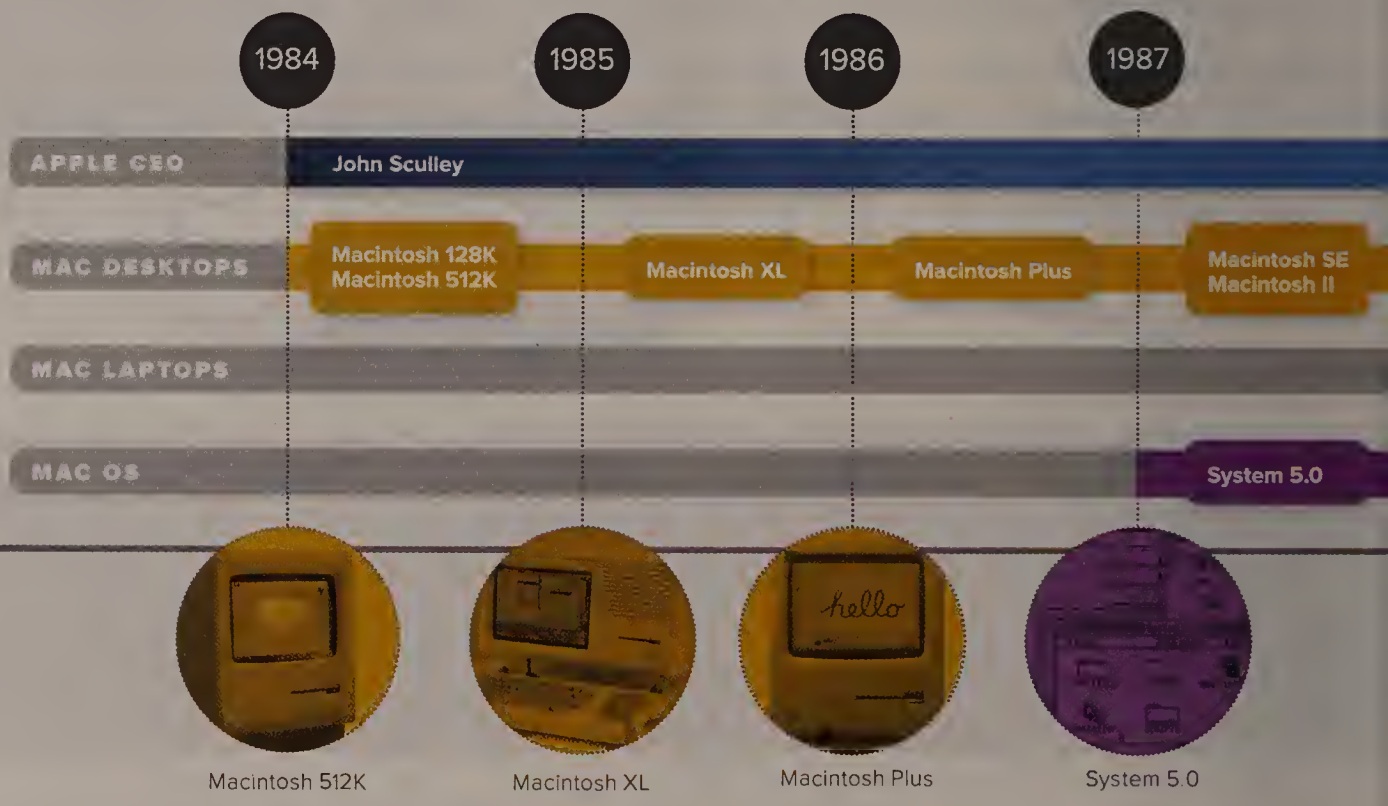
**Raines Cohen:** I had been using an Apple II since 1979. I saw my first Mac at the Boston Computer Society meeting in January 1984, the week after Apple's announcement. I got my first Mac—a 128K original—while working for a developer that summer. I helped start the BCS Mac group before going off to school.

I came out to Cal [the University of California, Berkeley] in the fall of 1984, and I went to the Access Computer Store in Berkeley, which had just started selling the Mac. And I mentioned I'd been doing user groups back in the Boston area before, and they told me about some other guys who'd had the same idea, and so in the fall of '84, the Berkeley Macintosh Users Group got started.

It was life changing. After dropping out of Cal to help run BMUG, I reenrolled as a geography major, but dropped out again. I ended up working at *MacWeek* magazine and then editing *NetProfessional* magazine.

## The Mac Through the Years

At the Mac's 30-year mark, we plot its milestones: the most important models, the CEOs who introduced them, and the OSs they ran.




Source: MacTracker

**David Morgenstern**: When I went to university in the 1970s, I was a music major, studying to be a classical singer. But I never became the singer I wanted to be. At the same time, I got married, had a child, so I got a job in the acquisitions department of an academic library. It was in the library that I started using computers. That's what I was doing during my BMUG years.

My first Mac? I do remember watching the Super Bowl ad, but the first one I got was the "Fat Mac"—the 512K Mac. I first went to a BMUG meeting in 1985, and I joined the group. There were weekly meetings back then. I worked as the librarian of the group, then I joined the organizing committee, and then I became chairman of the board in 1990.

Anyone who used MacPaint and MacWrite had their minds blown. The Mac GUI was so direct and understandable, it made a joke of the PC and Apple II platforms.

I still remember the thrill I felt when I saw the first demo of HyperCard. I spent $1000 on a 512K memory-upgrade card just so I could run HyperCard; that was a huge amount of money for me.

**Ron Hipschman:** I was a member of the Homebrew Computer Club, the original computer club, along with Steve Wozniak and Steve Jobs. They were pretty quiet in the meetings, I have to say. Jobs never said anything, but Wozniak participated a little bit here and there.

There was that one night where [Wozniak] held up his Radio Shack prototype board with a 6502 [8-bit microprocessor] and said, "Hey, I just built this. Anyone want the schematics? Oh, and here is the source-code listing for the BASIC that I wrote for it as well." I wish I still had those.

> 'The Mac GUI was so direct and understandable, it made a joke of the PC and Apple II platforms.'
> —*David Morgenstern*

We met at the Stanford Linear Accelerator Center auditorium (which I think has since been torn down—a real crime). People did demos out in the lobby. If you wanted to buy something, you would have go down to the gas station; Stanford wouldn't let us buy or sell anything on campus, so we'd go down to the Sharon Park 76 station and do our deals there.

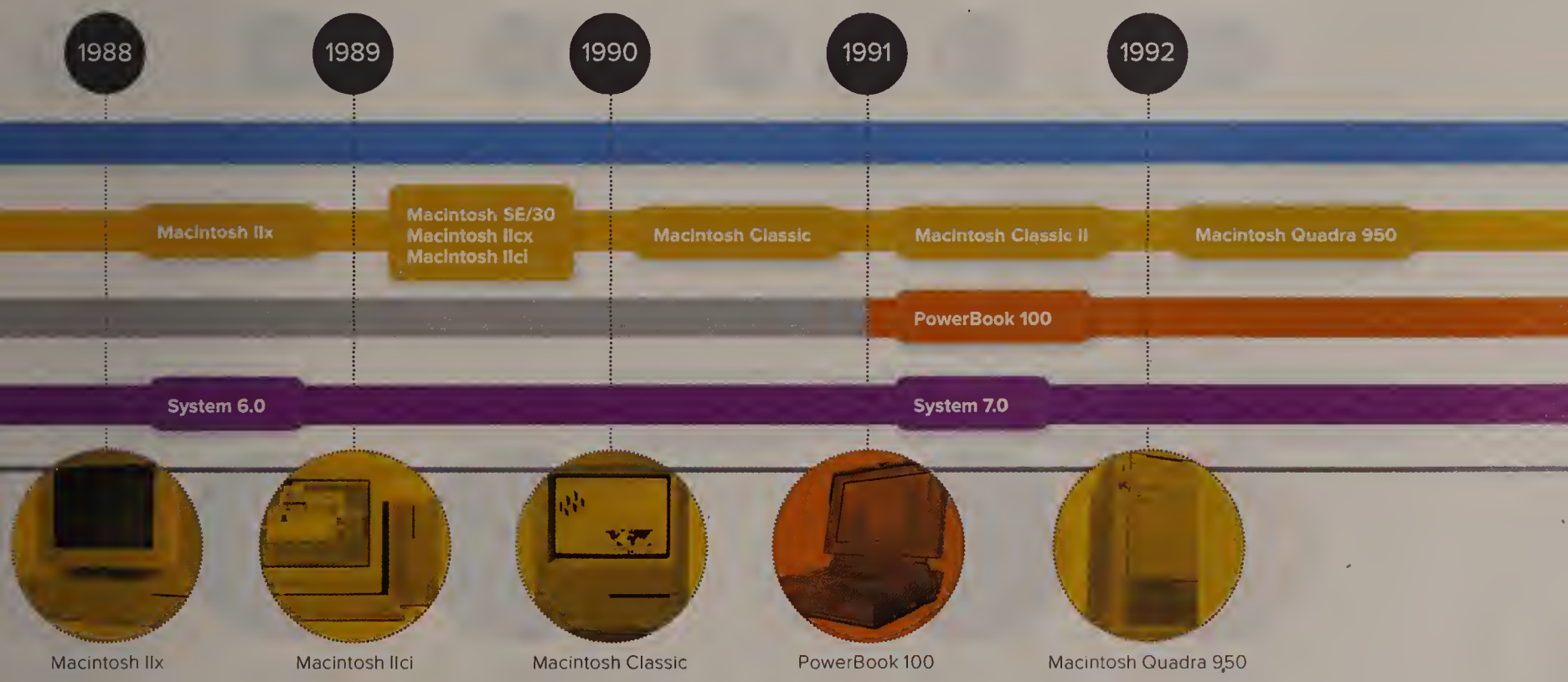
My first Mac was a Mac Plus. That wasn't my first computer. I had a CompuPro, running CP/M, before then. I waited until the Mac got a SCSI interface, so I could have a hard disk. My first hard disk was a 60MB drive, which was pretty big back then. You could not possibly fill a 60MB hard drive. I probably paid $500 or $600 for it.

Since then I've had a Mac Plus, a Mac IIcx, a [Quadra] 840AV, a G4 tower, and eventually a Mac Pro.

I went to original BMUG meetings in Berkeley, but since I lived in San Francisco, I was getting tired of going over to Berkeley. So some of us decided that we should have a meeting in San Francisco, since I worked at the Exploratorium; we called the group BMUGWest. We had a nice venue there at the time, called the McBean Theater, in the Exploratorium's original location at the Palace of Fine Arts. So we started meeting there around February of 1989. And we've been meeting there since then.

**David Schwartz:** In '89 I was selling home-stereo gear at a high-end audio store in Berkeley and decided I'd go back to school. And I thought, "Well, this time I should have a computer for school." So I bought a Mac SE and an ImageWriter.

I believe I called the BMUG Helpline to get help with making mailing labels in Microsoft Word. The guy who answered the phone said, "Why do you want to make mailing labels in Word?



You should be using FileMaker. Come on down, I'll show you how." So that was the start of a long love affair with FileMaker and Macintosh.

I ended up hanging out at BMUG all the time. I was on the board of directors—went all the way through until the very end. I'm still doing BMUG West and enjoying every minute of it.

**Duane Straub:** In 1984, I saw my first Mac 128K at Lawrence Livermore National Laboratory. At that time, they cost about $3500, I believe, and I thought, "That's really neat, but I will never buy one myself." Eventually, Livermore became the world's largest Macintosh site with over 15,000 Macs.

A couple of years later, I went back to college, got an information systems management degree, and got into the ranks of doing computer support at Livermore. Within a couple of years at that, many of my coworkers considered me the top tech at the world's largest Macintosh site. I really liked that. I was living high.

The first computer that I owned personally was a Mac Plus. I still have that computer today. It has a 33MHz 68030 processor with 8MB of RAM.

**Cal Simone:** I go way back. I operated a UNIVAC 1 and then went to mainframes. I saw the Super Bowl ad in 1984—it said that on January 24, something-something-something would happen, something about the Macintosh, and I said, "What the hell is a Macintosh?"

A year later I was in a recording studio in New York called Unique Recording, which was the world's largest MIDI studio at the time, with 60 different synthesizers. And they had a Mac 512Ke—the extended Fat Mac—that I got to use.

Later that year, a guy wanted me to set up a little studio for him, wanted me to figure out what kind of computer, PC or Mac, to put in it, and which one was better for music. I could never understand from that point why anybody would ever use a PC again. I never understood that.

## ALSO TURNING 30

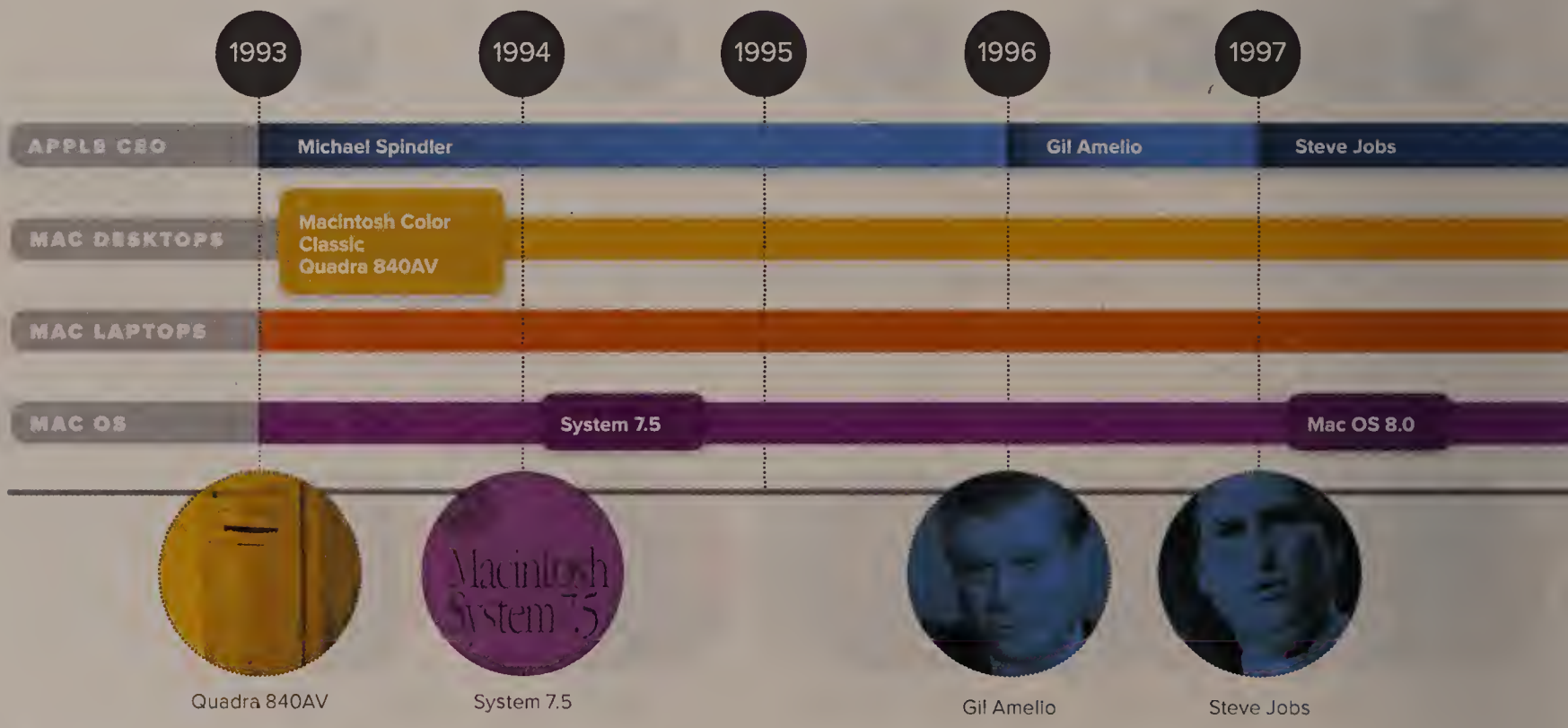
### Top 5 Films of 1984

1. *Beverly Hills Cop*
2. *Ghostbusters*
3. *Indiana Jones and the Temple of Doom*
4. *Gremlins*
5. *The Karate Kid*

Source: IMDb via Box Office Mojo (go.macworld.com/top5movies)

## The Role of the User Group

**Raines Cohen:** It was a love-hate thing with Apple. They set up a department to deal with user groups. At the time, the company didn't really have the capacity to directly support customers or to connect to them, so they said, "Oh, maybe we can work with these user groups, give them information, and they'll help spread it around." And that's what we did.



But we weren't under their control. We were independently looking for information, collaborating with journalists, hungry for data, and ready to get it and spread it every which way. So there were times of strain because of that.

For example, there was the time we showed off System 7 before it was actually released. I had a very tense call from an Apple PR person. Apple is very much about control, and here we were doing things that were out of their control and generating a lot of attention just by taking care of people.

They did invite user-group people down to Cupertino to get free products under nondisclosure. As part of the User Group Advisory Council, I got some early looks at the color Mac a couple of months before it came out. They continued that tradition with the Advisory Council for a long time after that.

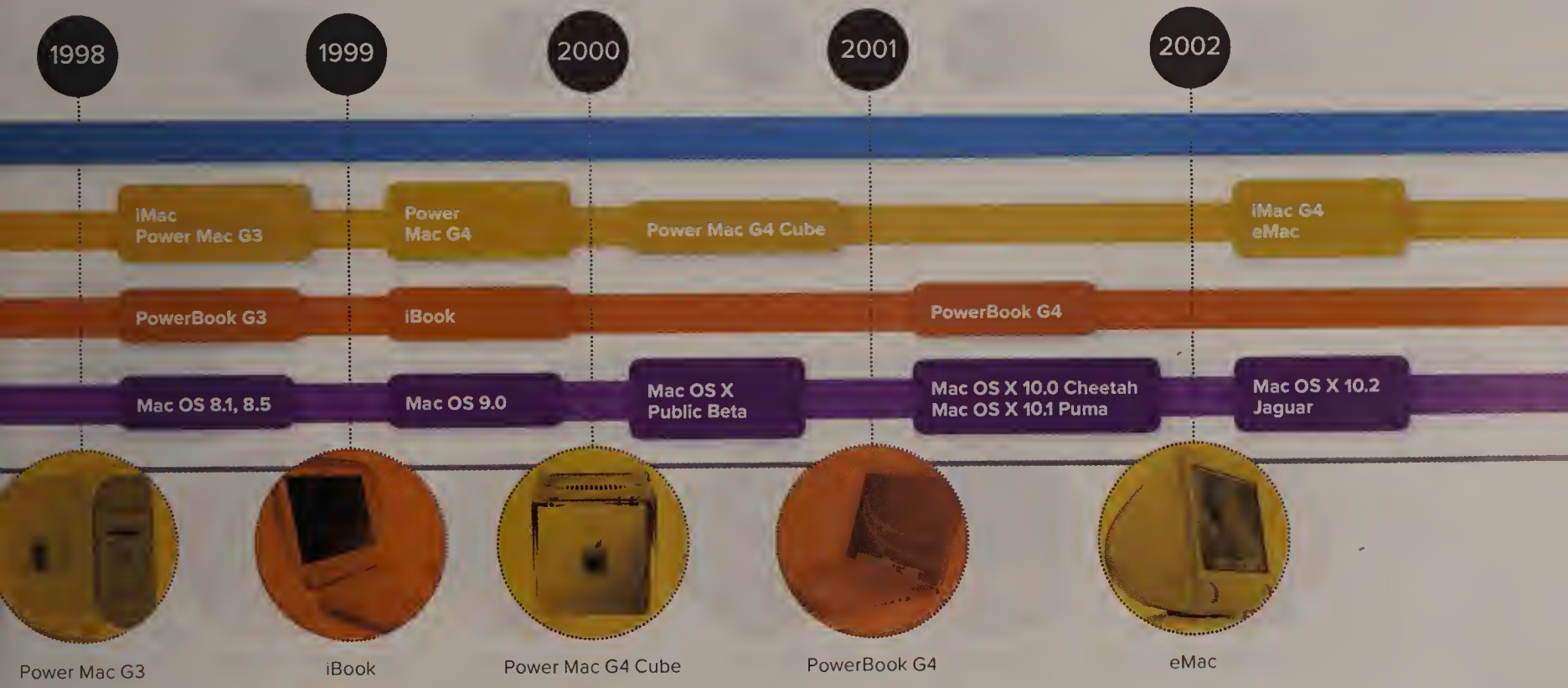
Nowadays, Apple can do lots of outreach and training and support using the channels they've developed over the last decade. But in general the kind of detailed support and general training we gave away is still only available on a paid basis. Our motto was: "We're in the business of giving away information." We had an incentive to get our members educated, because if they weren't, we'd take more time helping them out.

This turned out not to be economically sustainable once the Internet came along and people could get more-direct access to information and support. Still, to this day, I bump into people who express their appreciation for the help they got at the BMUG Helpline. We were half in and half out of the industry, forming grassroots connections, helping people everyday.

'We had an incentive to get our members educated, because if they weren't, we'd take more time helping them out.'
—*Raines Cohen*

**David Morgenstern:** You really can't imagine today the Apple back then—the whole situation with users, it was totally different. I mean all the users were so excited about the Macintosh because it was so different. People would say, "I have a huge mainframe but it can't do anything like this little box does." Everybody was just so excited. It was like being in a club, and if you were a Macintosh guy and you met some other Macintosh guy, you were, like, instantly sympathetic.

The fact is that things didn't always work. Macs could be really hard to use. That's why early BMUG meetings were weekly. There was no Internet to share information. These were weekly meetings that were attended by 200 to 300 people every week. I remember there was a thing that lasted for a whole year about how the LaserWriters sucked and what you had to do to get it to work. Same with the ImageWriter: They were really, really notorious, but there was no support. There was no Genius Bar. There was just BMUG.



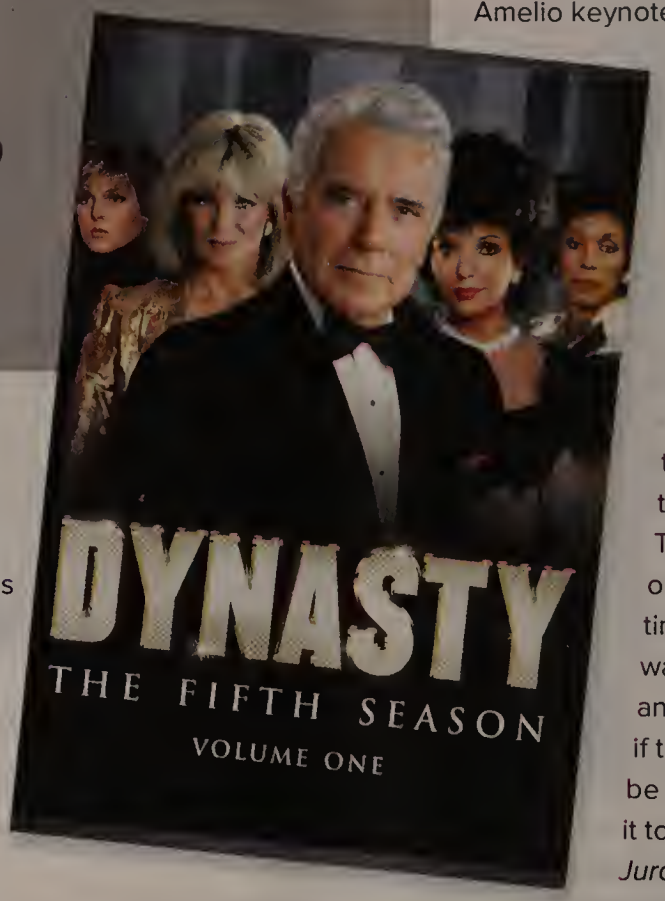
There was no formal training program: People just talked and shared information. The help was professional in spirit, though. What a volunteer helper was able to do was what they were able to do, if that makes any sense. Sometimes, the help was good and other times not so good. Many BMUG volunteers went on to professional support jobs in local Mac companies and consultancies.

**ALSO TURNING 30**

### Top 5 TV Shows of 1984

1. *Dynasty (season 5)*
2. *Dallas* (season 8)
3. *The Cosby Show*
4. *60 Minutes* (season 17)
5. *Family Ties* (season 3)

Source: Nielsen ratings via Classic TV Archive (go macworld.com/top5tv)




## Steve Jobs: In and Out at Apple

**Raines Cohen:** I recall seeing a letter from Steve Jobs's assistant thanking us for sending the first BMUG newsletter, which was the size of a book—120 pages long—and one of the first examples of laser printing. We didn't know it, but by then Steve was already on the way out.

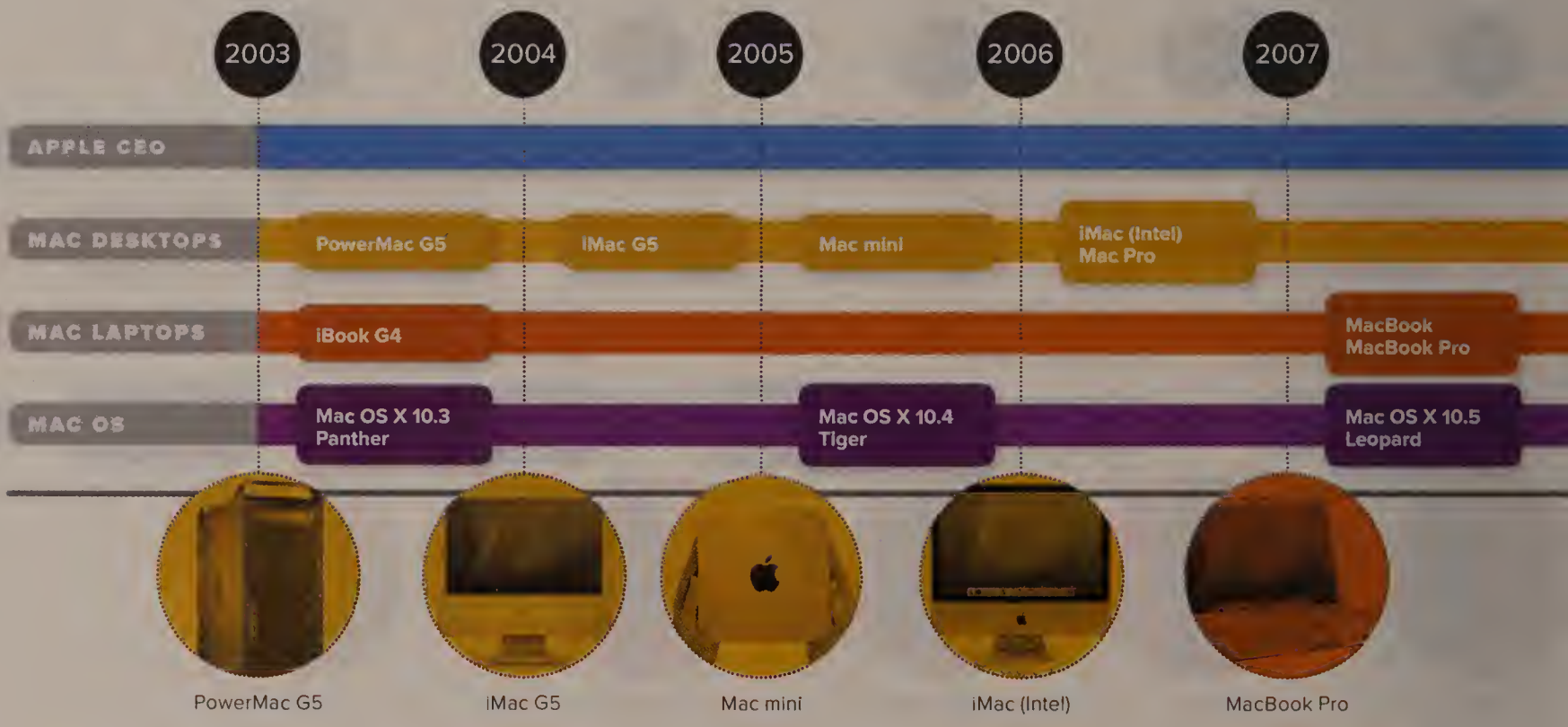
**David Morgenstern:** I certainly didn't feel that the sky was falling when Steve Jobs left that first time. He came to a BMUG meeting after he'd been in the desert for a while making the Next computer. He came and showed us the NextCube and a laser printer that worked off of the Display PostScript [that was] built into the Next software and the megapixel display. I remember we had this guy Harvey who wanted to crack open the laser printer to see what controller it used, to see if you could hack it, and Steve was really concerned about that: "Stop that man!"

**Raines Cohen:** Mostly it was interesting to see over the years, as Apple's leadership changed, how they lost the discipline of message control. You remember the infamous Gil Amelio keynote [at Macworld Expo] that lasted forever; that was just an example of how things were out of control. When Jobs came back, they refocused.

**Ron Hipschman:** You could tell things were off track by some of the T-shirts that came out of Apple at the time. I have one that was given to me by an Apple employee—if they wore it they'd be fired—so they gave it to me. It's the *Jurassic Park* logo but with an Apple in the middle, and it says "Jurapple Park"—because so many people had evolved out of Apple at that point.

**David Morgenstern:** I was at the party launching System 7.5, I think it was, and they gave out T-shirts that said something along the lines of "Sucks Less." They were a little defensive.

**Cal Simone:** After Steve came back, I went to the Flint Center [in Cupertino] to watch the unveiling of the iMac, where he said, "We've got 27 different products, now we're going to have four"—and they only had three of them available! He



simplified the product line and gave names to things instead of the numbers. And that was basically it. Apple just came alive.

**David Schwartz:** The most memorable thing about Michael Spindler is him giving a keynote address wearing polyester pants that had been left in the dryer 30 minutes too long (laughing). Steve never had that problem.

**Ron Hipschman:** He [Jobs] was a miserable human being at times. I remember seeing him after some keynote address, not long after he came back to Apple, sitting in the lobby of one of the hotels [near the event]. He was mad about something that a press person or analyst had said—maybe it was the keynote itself, I don't know—but he was hugely mad. And all these Apple people were standing around, a whole ring of people around him, maybe 20 feet away, but nobody would look at him. They didn't want to get fired or have him throw something at them.

I remember talking to one of the lead engineers of the Apple II, and he told me that he knew he was finished at Apple when Steve Jobs looked at the Mac II motherboard and said, "You have to change that resistor because I don't like the color of it." Because when he looked at the motherboard, he wanted it to look a certain way.

ALSO TURNING 30

## Top 5 Albums of 1984

1. *Thriller (Michael Jackson)*
2. *Sports* (Huey Lewis and the News)
3. *Can't Slow Down* (Lionel Richie)
4. *An Innocent Man* (Billy Joel)
5. *Colour By Numbers* (Culture Club)

Source: Billboard Archive via Sporacle.com (go.macworld.com/top5albums)

## The iPhone and Beyond

**Ron Hipschman:** I just watched the keynote where Jobs introduced the iPhone the other night, and I noticed that he simply kept repeating, over and over, "iPod, phone, Internet access. iPod, phone, Internet access." And that's actually what did it. It really is the Internet in your pocket—the ubiquitous Internet that we'd all been lusting after, right in front of us.

**David Schwartz:** When the iPad came out, I remember getting a lot of pushback from people saying, "Oh, it's just a big iPhone." And I was like, "You obviously don't get it." I had to

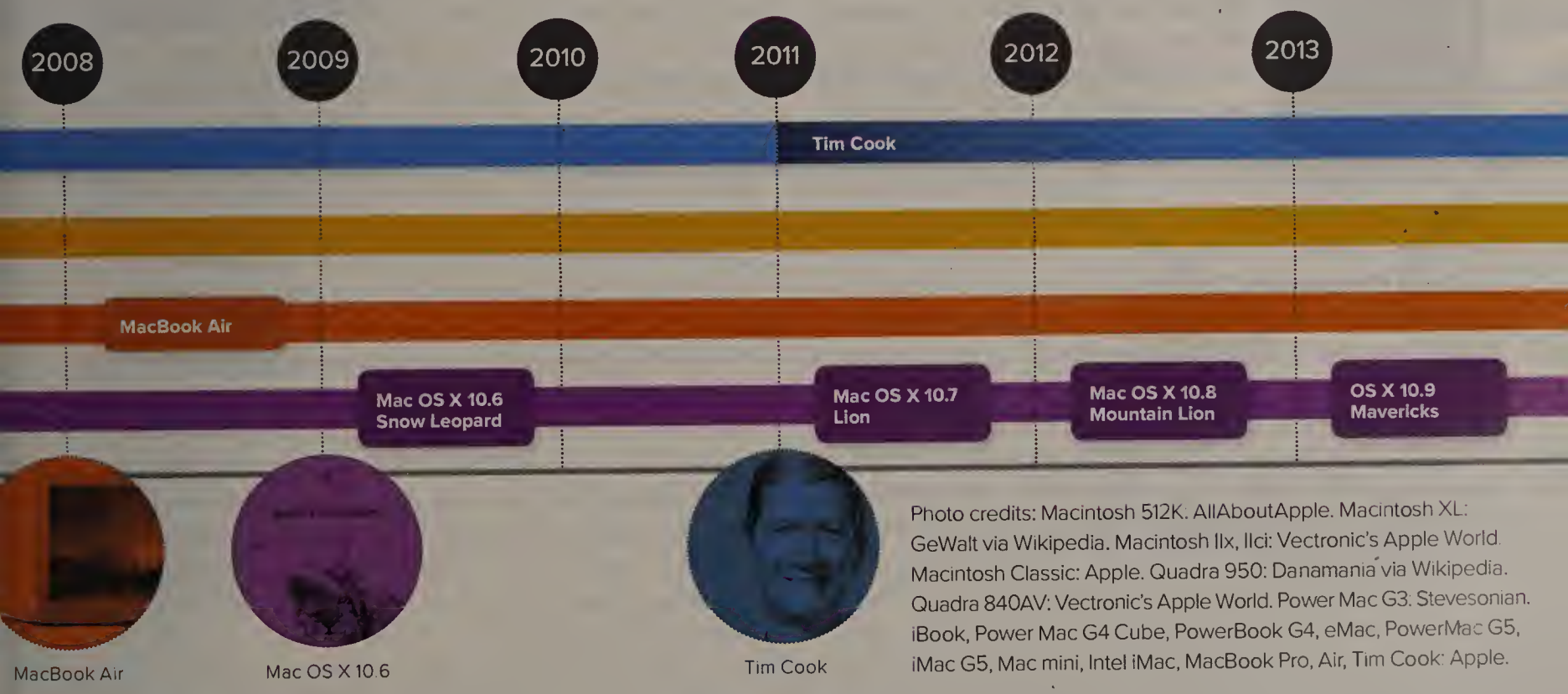



Photo credits: Macintosh 512K. AllAboutApple. Macintosh XL: GeWalt via Wikipedia. Macintosh IIx, IIci: Vectronic's Apple World. Macintosh Classic: Apple. Quadra 950: Danamania via Wikipedia. Quadra 840AV: Vectronic's Apple World. Power Mac G3: Stevesonian. iBook, Power Mac G4 Cube, PowerBook G4, eMac, PowerMac G5, iMac G5, Mac mini, Intel iMac, MacBook Pro, Air, Tim Cook: Apple.

explain to them, "It's a platform. The hardware is great. But it's really what you choose to use with it. It's a platform for applications, it's a platform for productivity."

"How do you like your iPad?"—that's a foolish question. "How do you like using Safari on the iPad, how do you like getting mail on the iPad, how do you like reading news or using this or that third-party app on the iPad?" Those are the real questions.

**Duane Straub:** The thing is, it's brought Apple back into business, along with cool Macintoshes. The phone and the iPad bring all these people into the Macintosh now. Now, the Macintosh is huge. It's accepted in business. It's fantastic. It's a new golden age for Macintosh now.

**Cal Simone:** I remember when I was in a hospital and saw people taking medical histories with an iPad. That was remarkable. The iPad got into places that no Apple product had ever been able to seep into. You started seeing it everywhere. For me, it was less about it as a personal device than [the way] it just seeped into the way we operate as a society, in a way that we hadn't before.

**David Schwartz:** And the MacBook Air continues to have this unique place—it's amazing to me. I go to these meetings full of Windows users, Windows support people—people whose lives revolve around Windows—and they all pull out their MacBook Air to take notes. It's nothing to them. They're not really Mac users per se, they just love that MacBook Air. It's a fantastic piece of hardware.

## Is the Mac Still Special?

**Duane Straub:** I get home from work after working on computers, supporting Macintosh computers all day long, and the first thing I do is go to my Macintosh and do stuff that I wasn't doing at work. I continue to love it.

**David Schwartz:** Using Mac OS X on a Macintosh is joyful. I think I get a fantastic experience opening the machine almost everyday.

**David Morgenstern:** The Mac OS is more successful than it ever has been, but I don't know that it's as understandable as it once was back in the 1990s. OS X brought great stability but also complexity. And Apple in the past decade has been much readier to expand the boundaries of the Mac user interface guidelines than they were in the 1990s. Along with changes to reassure the influx of PC users into the base, I find some of its newer features un-classic-Mac-like. I know too much about the Mac for my own good.

Like a lot of power users, I'm concerned about the impact of sandboxing on professional workflows. I'm disturbed by the push toward single-window interfaces without options for multiple windows and palettes that we see with the large screens nowadays. Older users and their eyesight issues aren't being taken care of in the Mac and iOS interfaces. I can't tell you how many people are having problems with iOS 7, because the UI elements are often too small.

**Raines Cohen:** We've had a real generational shift, from when we were tinkering with it and making it do all these amazing things, hacking it, to now, when people just want to use it as a tool. They don't have to learn all the stuff we did. The essence is still there, but it's easier. We're saying now: Just get out of my way and let me do my job.

I remember talking to some very sad people when the Intel machines came out. Suddenly, all the lore of experience that people had learned was irrelevant. These people who had learned everything about the Macintosh that you could know, who knew all about PRAMs and things like that—they knew how to fix stuff. All of that was out the window. OS X, they couldn't figure it out. The new Intel machines and their requirements—they couldn't figure it out, so they were really grieving for a number of years until they figured out how to fix the new stuff.

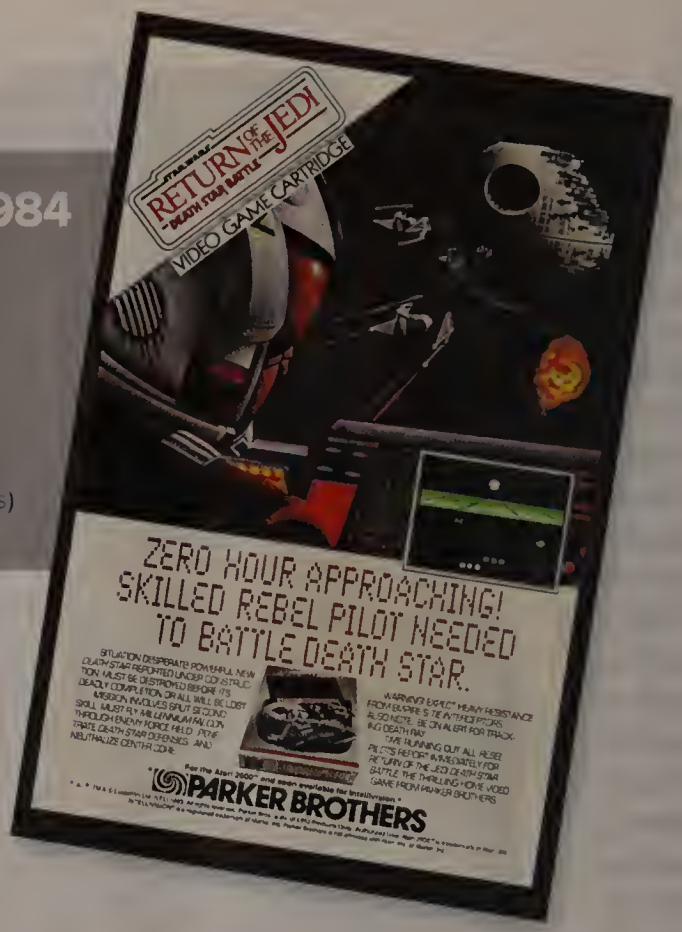
**Ron Hipschman:** I remember going into a shop out on Geary [in San Francisco] when they put the first Mac out. I went up to it, wanting to try it out, and I'm looking in the drawers for a manual—I'm a manual reader. And there isn't one. I went up to the guy at the desk and said, "Do you have the manuals for this computer? I'd like to play with it." And he said no, he'd loaned them out to somebody, but he said, "Go ahead anyway." And I was able to get through MacPaint and MacWrite without any trouble at all. I could figure out Cut and Paste and how to start programs up and scroll through windows. And I said to myself, "This is the way computers should work."

### ALSO TURNING 30

### Top 5 Video Games of 1984

1. *Star Wars: Return of the Jedi*
2. *The Hitchhiker's Guide to the Galaxy*
3. *Stocker*
4. *Sherlock*
5. *Dragon Slayer*

Source: IMDb (go.macworld.com/top5vgames)



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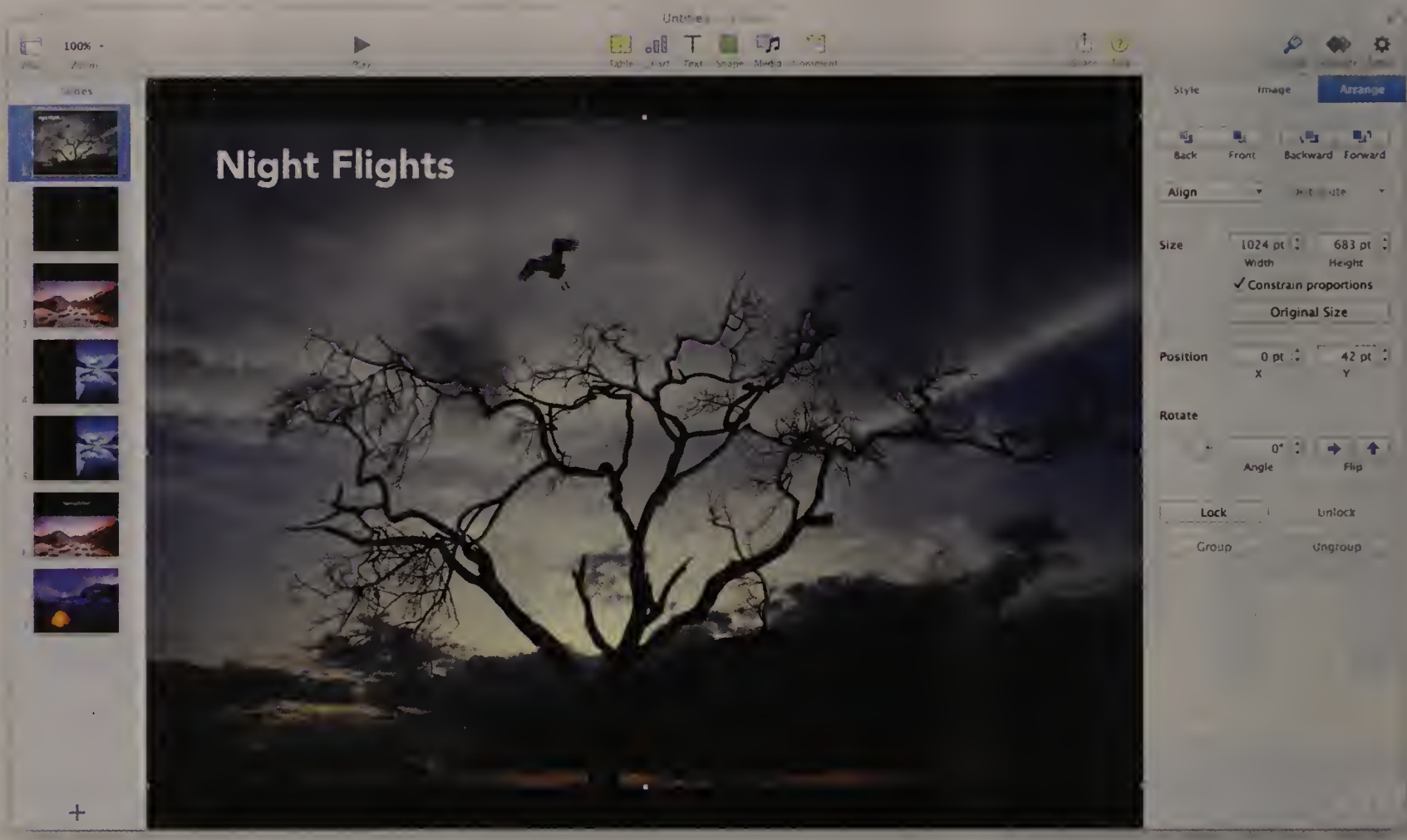
# Working Mac

Tips, Tricks, and Tools to Make You and Your Mac More Productive




**Dynamic Inspector** Keynote 6.0 moves several controls to a dynamic new Inspector sidebar on the right.

## Keynote 6.0: A Mixed Bag

Apple's wholly reimagined Mac presentation tool wins some, loses some.

BY JOE KISSELL

Review
RATING
PRICE
Free
COMPANY
Apple
URL
apple.com

I can sum up Keynote 6.0 for Mac in a few words: Apple giveth, and Apple taketh away.

Keynote 6.0 offers useful new features, a reworked user interface, and vastly improved compatibility and consistency across platforms. But numerous features from the previous version are gone, which can wreak havoc with older presentations. As evidenced by the fact that most of the Mac App Store ratings for this new version are either 5 stars or 1 star, your reaction to Keynote 6.0 will depend on how you use the app—you'll love it or you'll hate it.

### What's Missing and What's Improved

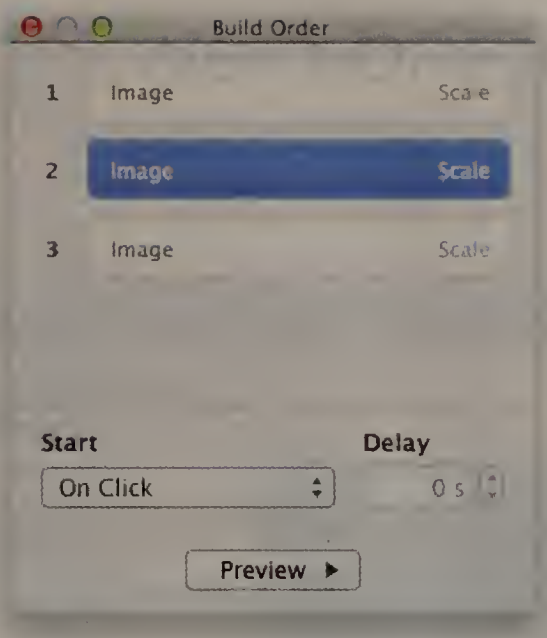
Let's start with the missing features, since people are up in arms about them. One Apple Support forum thread is dedicated to compiling a master list (go.macworld.com/keynotemissing), but I'll give a few prominent examples: Master slides can no longer include animations (builds, actions, and transitions). The toolbar is no longer customizable. Apple has removed several themes, plus a handful of transitions and builds. Smart builds are no more. Apple has reduced its AppleScript support to almost nothing. The presenter display is less customizable. You can no longer link objects to other Keynote presentations. And so the list goes on.

Despite the missing features, it would be unfair to characterize Keynote as being "dumbed down." Indeed, Apple has added splendid capabilities that make Keynote smarter in several respects.

It now offers built-in and user-defined styles for characters, paragraphs, lists, and shapes that behave much as styles in a word processor do, enabling you to achieve a consistent look with much less bother. Paragraphs can now have borders, rules, and background colors. If you add a soundtrack to your presentation, it can include a playlist of multiple tracks. And although Apple removed some themes and animations, it added even more (and updated some older themes with new

fonts and layouts). All built-in themes, including several entirely new ones, come in 4:3 and widescreen versions; you'll find about half a dozen additions each in the Transition, Build In, and Build Out animation categories; and the program has a set of emphasis actions to call attention to existing elements (Blink, Bounce, Flip, Jiggle, Pop, and Pulse). Keynote now supports up to six displays, too.

Apple makes a big deal about how Keynote can now share files seamlessly across OS X, iOS, and iCloud.com's Keynote Web app without any loss of formatting, and that's basically correct




**Interface Missteps** Can you guess which build is In, which is Action, and which is Out?

## Keynote 6.0 offers useful new features, a reworked user interface, and vastly improved compatibility and consistency across platforms.

(some elements, such as fonts available only on your Mac, won't transfer). If you frequently use Keynote on an iOS device, you'll find this change a godsend. If you use Keynote only on a Mac, it's neither here nor there. You can share presentations more easily in various ways, including giving people permission to view and/or edit them on iCloud.com—but again, that's helpful only for certain kinds of users.

### New User Interface, New Approach

If you're used to the previous Keynote, your first impression of the new version may be that all the controls are missing—the toolbar is sparsely populated, the format bar is gone, and the floating Inspector palette is nowhere to be found. In fact, virtually every control is still present in Keynote, but things have been rearranged and sometimes renamed.

Keynote 6.0 puts almost every control in a single window, and what's now called the Inspector is a sidebar on the right that dynamically changes to reflect the operations you can perform on whatever you've currently selected. (Some Inspector panes have multiple tabs, such as Style, Text, and Arrange for text objects.) I prefer the new arrangement because it makes better use of screen real estate, and because most controls are now larger and clearly labeled.

Under the new interface, I repeatedly had moments of thinking, "Oh phooey, I can no longer do *x*," only to find that *x* simply required a different approach. One example: When playing a presentation, the presenter display used to have build markers—colored bubbles under the current slide/build that showed you how many builds were left on that slide. Those markers are gone, but instead Keynote now displays text above the next slide/build, telling you how many builds are left on the current slide.

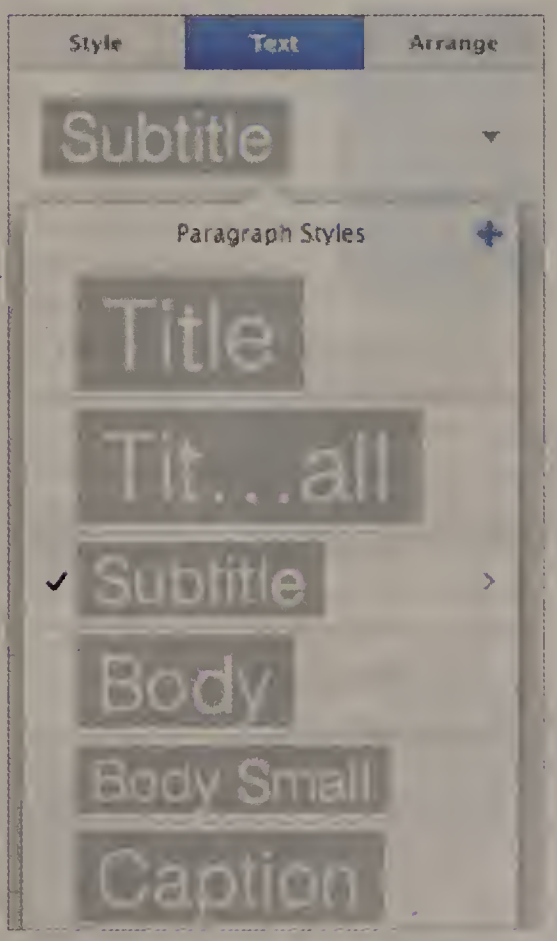
Another example: Although it initially appears as if you can no longer arbitrarily layer objects on individual slides with objects on master slides (because the 'Allow objects on slide to layer with master' checkbox has disappeared), it turns out that you can accomplish the same thing simply by selecting the object on the master slide and then selecting the 'Define as (Shape/Text/Media) Placeholder' checkbox on the Style tab.

Some of the interface changes, however, such as the way builds are arranged, are just wrong. You now display and edit the builds on a slide by choosing *View → Show Build Order*, which displays a floating Build Order palette. So far, so good—but this palette doesn't indicate the name of individual graphics or what type of build (In, Out, or Action) each item is. You must select each item individually and consult the Animate Inspector to find out.

### Bottom Line

If your presentations are full of defunct features and your workflow depends on a heavily customized toolbar, a modified presenter display, and AppleScript, Keynote 6.0 will cause you no end of frustration. Keep using version 5.3, which Apple leaves in your Applications folder when Keynote 6.0 is installed. Some pundits predict that Keynote will follow a trajectory similar to that of Final Cut Pro X, with Apple addressing serious shortcomings in a series of updates. It's a reasonable hope.

New users should find Keynote 6.0 more approachable, and those who work on an iPad or in a Web browser will have a much easier time. Longtime users who have never tried the advanced features may consider this update a great improvement. But keep backups of your existing presentations and of Keynote 5.3, just in case.

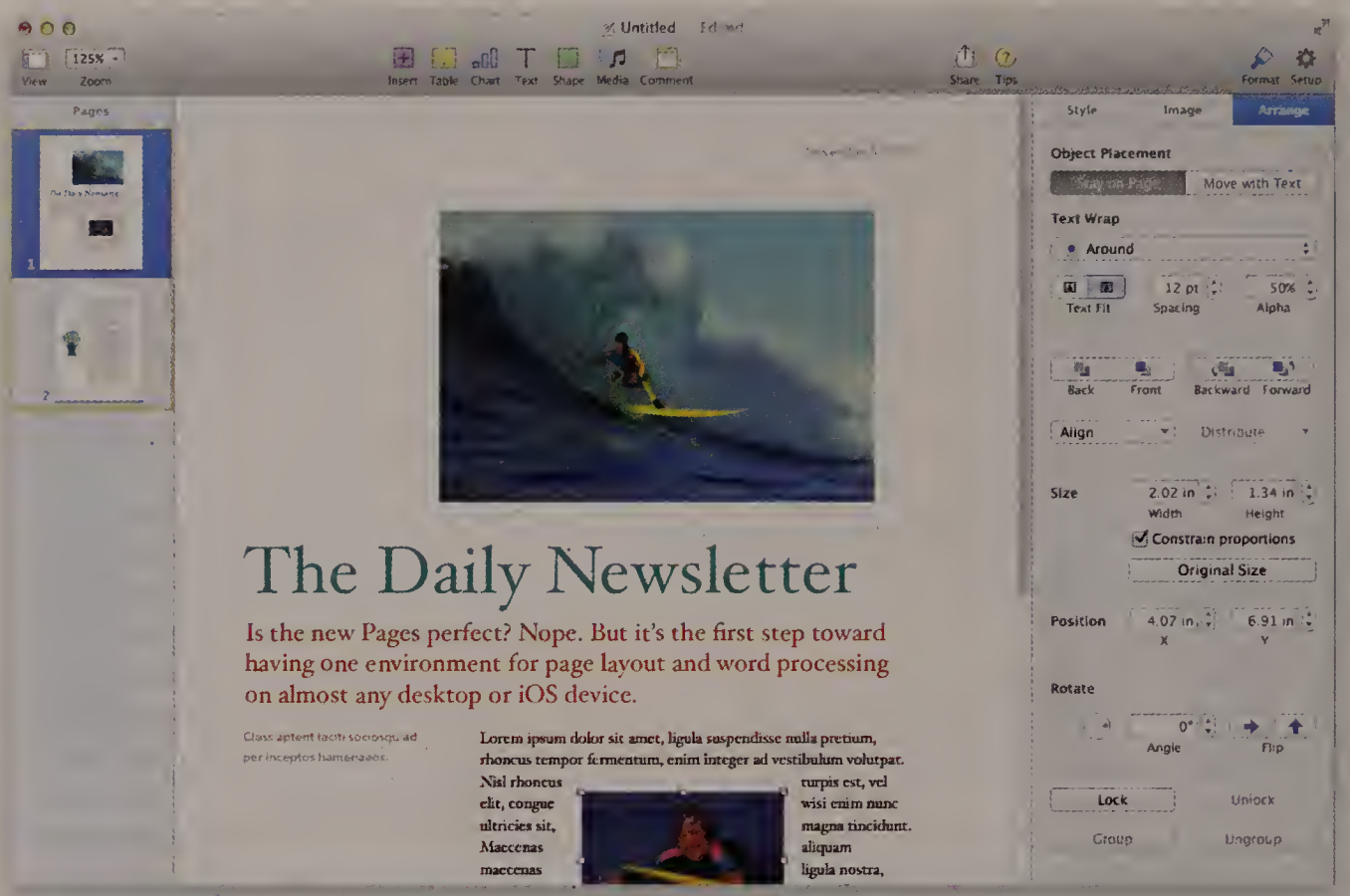



**A New Style** Keynote now includes styles for characters, paragraphs, lists, and shapes.

# Pages 5.0: A Brand-New Program

Apple's word processing and layout app for Mac is stripped down, but not dumbed down.

**BY JEFFERY BATTERSBY**




**Clean, Context-Sensitive** Pages' redesigned user interface changes depending on the type of object you're editing.

**Review**
RATING
PRICE $20
COMPANY Apple
URL apple.com

Let me state this from the beginning: If you have been using Pages '09's more sophisticated page-layout features, Pages version 5.0 for Mac is not the program for you. Pages 5.0 is not an upgrade, but a brand-new application, and it is not (yet) the Pages you've been waiting for. This fact may make you sad; everyone wants something shiny and new. But don't be—Pages '09 still works, and you can get by with that for now. Your day is coming, but it isn't today.

Now that I've gotten that out of the way, allow me to say this: I like the new Pages a lot—not for a massive set of innovative features, and not because it's completely stripped down, but because Apple appears to be establishing a foundation for amazing things to come.

The new Pages is without question related to its predecessor in name only. The app's list of missing features (go.macworld.com/pagesmissing) is significant: It offers limited page-layout capabilities, it has no linked text boxes, you can't customize the toolbar, it provides almost no AppleScript support, it has no style drawer, and it lacks file-level compatibility with Pages '09. Honestly, the list of what's missing could go on and on.

This makes it a huge disappointment for users who have been happy with Pages and who have developed unique and incredible workflows around the software. Interestingly, the current litany of Pages disappointments mirrors the things that users of AppleWorks were disappointed with when the first version of Pages was released. In fact, looking back at my review of the first release of Pages, what I find notable is how many of the features missing from the original Pages are the same features that are missing from the newest version of Pages.

## Rewritten and Web-Ready

As stripped down as Pages seems, this is no piddly update. Completely rewritten as a 64-bit application, the latest version of Pages offers features previously unavailable or even impossible. A look around confirms that it has features unmatched in almost any other word processing tool.

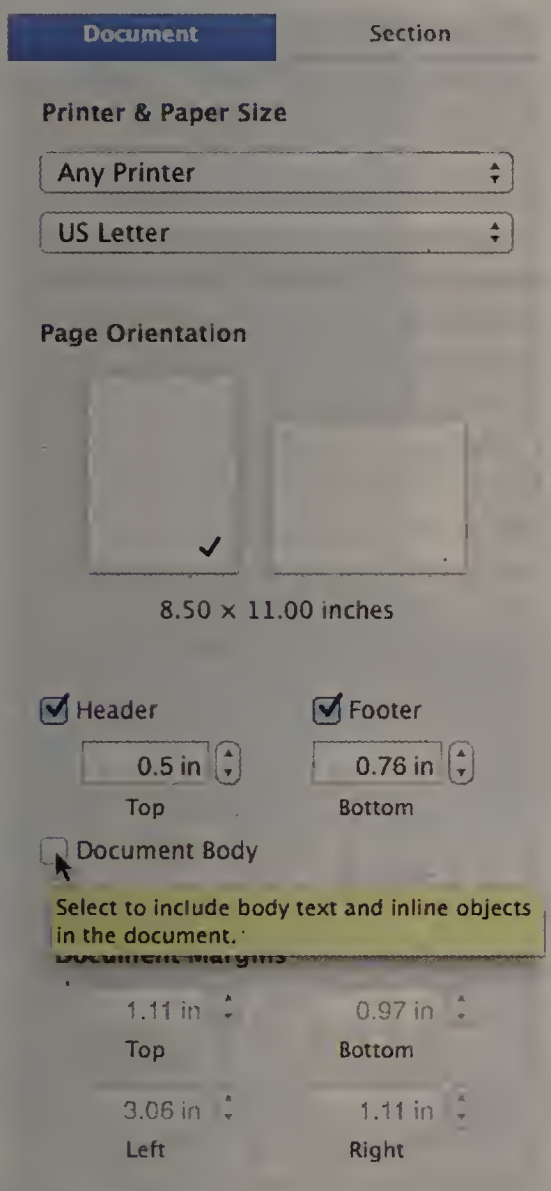
Pages now works and shares files seamlessly with either the Mac or iOS version of the software. It's also available to anyone using a modern Web browser, including Windows users who previously had no access to the app (a registered iCloud account is required). On top of

Completely rewritten as a 64-bit application, the latest version of Pages offers features previously unavailable or even impossible.

that, Pages supports real-time collaboration on documents, which in my testing functioned amazingly well.

Word processing in Pages works as you'd expect, although I miss the option of having a formatting menu in the toolbar. The new Pages lacks the paragraph-styles drawer that Pages '09 had, but I find that changing, adding, and updating paragraph styles is easier and more obvious than it was in the past. Paragraph styles now appear in the app's inspector. When you make a change to a paragraph, an Update button appears, allowing you to change the style for all the paragraphs using that style in your document.

The app's new file format doubles as a word processing document and a page-layout document. All new blank files behave like traditional word processing documents with standard body text, paragraph styles, embedded graphics, tables, and other objects. But when you uncheck the Document Body checkbox in the Document Setup tab, you can use the document canvas in the same way you would use a normal page-layout canvas, easily adding and rearranging images, text boxes, and other document elements.




**Quick Layout Switch** Removing the body text in a document lets you access layout features.

### A Version-One App, Through and Through

Even so, Pages is missing much of what's necessary to make it a great page-layout application (and perhaps even a good one). You can't rearrange the page order, and you have no way to flow text from one text box to another, so the value of what's on offer is limited. But—and this is a big "but"—you lose none of the page-layout features when you move the document to your iPhone, your iPad, or the Web.

The new app has dispensed with the multiple inspectors that Pages '09 employed to format virtually every aspect of your document, instead using a new intelligent inspector that changes dynamically depending on what you're doing. Select an image, and the inspector offers tools for editing images. Select text, and text-editing options appear. Select an object, and object-editing tools appear. I, for one, prefer this arrangement to the Pages '09 inspectors. It makes for a much cleaner work environment, and I always found that the old inspectors were more in my way than they were useful.

One last, important note: When you download the new Pages from the Mac App Store, it doesn't replace the old version of Pages. The old version is still on your Mac, but it's situated in an iWork '09 folder inside your Applications folder.

### Bottom Line

Apple's latest version of Pages is, quite simply, a brand-new application. Think of it as version 1 of a new way of creating and editing word processing and page-layout documents. As such it is an excellent application. Is it missing features? You bet it is. What Pages 5.0 is lacking is what is usually lacking from version 1 of any application: all the features you really want. I recommend waiting for the next update.

## A Simple Way to Stand

You've probably seen the reports suggesting that sitting at a desk all day will kill you dead, long before your time. The new VariDesk line (www.varidesk.com) lets you switch between standing and sitting as often as you need. The cleverly designed platform fits on a standard desk; it lifts your Mac up into position to let you keep working while you stand, and lowers it back onto your desk for a sitter's view. The VariDesk comes in a few sizes to accommodate everything from a laptop to a dual-monitor Mac. It's also relatively affordable, costing between $275 and $300.

Download the VariDesk app for reminders of when to stand or sit down. The app even has a calorie counter to estimate how many calories you're burning with your new, virtuous lifestyle.—JOEL MATHIS

# Secrets of the iOS Keyboard

Learn about hidden characters and handy shortcuts that you may have never noticed.

BY KIRK McELHEARN

**Loads of Emoji** Access hundreds of fun symbols by adding the Emoji keyboard.

Although iOS 7 packs a lot of changes, you may not have ever looked closely at one part of Apple's mobile OS that you use often: your iPhone or iPad's keyboard. Discover hidden characters and handy shortcuts with this guide.

## What You See in the Keyboard Depends on What You Need

The iOS 7 keyboard displays different keys depending on an app's function. Messages' keyboard is simple and spare. In Mail, the @ key is prominently displayed in the bottom row, so you can easily type email addresses. (Before, you had to press the '123' key to get to it.) In Twitter apps, the keyboard has both the @ and # symbols—the former for Twitter usernames, and the latter for hashtags.

## Find Web Necessities

While the keyboard often anticipates your needs, you'll probably be surprised to see some keys missing in iOS 7. For example, the '.com' key that formerly appeared when you typed in Safari's address field seems to be AWOL. Don't fret: A '.com' shortcut still exists. Tap and hold the period (.) key to make a pop-up menu appear, and slide your finger up to the '.com' key.

If your device's region is not set to the United States, you'll see different options when holding the period key: If the region is the United Kingdom, you'll get '.co.uk'; if it's France, you'll see '.fr'; and so on.

This shortcut isn't new, but it is useful now that the direct '.com' key is gone.

## Reveal Hidden Characters

Do you need to type accented characters or currency symbols? For the former, tap and hold the letter you want to type: If you want to produce an é, for example, tap and hold the E key to get a pop-up menu with several accented characters. Slide your finger to the appropriate one, and then release. For currencies, tap and hold the dollar-sign ($) key.

Need to use the degree symbol, such as for temperatures or angles? Tap and hold the key for the number 0. You'll find more special characters if you tap and hold different punctuation marks.

**Web Shortcuts** In Safari, the '.com' button isn't far away—if you know where to look.

## Add the Emoji Keyboard

You know those little pictures that some people insert in text messages and tweets—from crying smiley faces to tiny trees? They're called Emoji, and iOS includes a keyboard containing hundreds of these fun characters and symbols.

To add it to your iOS device, go to *Settings* → *General* → *Keyboards* → *Keyboard*. Tap *Add New Keyboard* and scroll down to *Emoji*. Tap that item.

You'll now see a small globe key at the bottom of the keyboard. Tap it to access the Emoji keyboard. When you do so, several buttons will appear at the bottom of the keyboard, each one representing a different category of Emoji characters and symbols. Above the characters, dots indicate how many "pages" of symbols exist in each category: Just swipe to the left or right to change what you can access. To go back to the normal keyboard, simply tap the globe key again.

## Type Punctuation More Quickly

In iOS, typing punctuation can be a drag. Take the humble question mark: Usually you have to tap the '123' key, tap the question-mark (?) key there, and tap the 'ABC' key to return to the letter keyboard.

Here's a quicker way. First tap and hold the '123' key. Now, without removing your finger from the keyboard, slide over to the question-mark (or any other punctuation-mark) key, and then release. The keyboard will insert the symbol and automatically switch back to the letter keyboard.

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# Reviews

Hardware and Software for All Your Business Needs

## Hardware

### Kanex Multi-Sync Keyboard

●●●½; $69; Kanex; www.kanexlive.com

The Multi-Sync Keyboard pairs with up to three Bluetooth devices, but it also works as a wired keyboard with your Mac (or with an iOS device using Apple's Camera Connection Kit or its Lightning to USB Camera Adapter). The keyboard draws power from the USB connection or two AAA batteries.

The 17.4-inch-wide Multi-Sync offers a full complement of extended-keyboard keys, including a numeric keypad. It has 15 F-keys that double as special-function keys, and the last seven of these keys work with iOS devices, too (oddly, the brightness keys do not). You also get two additional keys for iOS: a Home key and a Spotlight-search key. Unfortunately, their size and location mean that the modifier keys (⌘, <Control>, and <Option>) are smaller than normal and are situated in slightly different locations relative to other keys. (In addition, what appears to be a bug in iOS 7 prevents the Spotlight-search button from working currently.)

Although the keyboard is only 4.9 inches deep and 0.7 inch thick at its thickest point, it's big enough and heavy enough that you probably won't want to pack it for travel.

The keys don't feel nearly as nice as those on Apple's keyboards. The edges of Kanex's keys are slightly sharper, and the keys require more force to press, while providing less tactile feedback. In addition, on my review unit, the <Tab> key sometimes didn't register on my first try. Users who aren't picky about the feel of their keys, however, will likely be happy with the Multi-Sync Keyboard.—DAN FRAKES

### Targus Universal USB 3.0 DV Docking Station with Power (ACP71USZ)

●●●; $220; Targus; www.targus.com

If you're struggling with too few ports on your superthin laptop, you might consider the Targus Universal USB 3.0 DV Docking Station with Power (model ACP71USZ).

The 10.63-inch dock occupies a USB 3.0 port on your laptop, but it provides two more of those plus four USB 2.0 ports. I tested USB 3.0 performance by transferring files between a portable USB 3.0 hard drive and my laptop's solid-state drive. With two 24-inch displays also attached to the dock, read speeds reached 93.9 MBps (with a 10GB collection of files and folders) and 112.5 MBps (with a single 10GB file), and write speeds hit 89.0 MBps (folders) and 62.8 MBps (single file). I saw no decrease in performance when I added a second USB 3.0 hard drive. Other ports include gigabit ethernet and audio-in and -out.

The resolution of the DisplayLink-equipped dock is more than adequate to drive two 24-inch external displays at 1920 by 1200 (or 1920 by 1080) pixels each.

Model ACP71USZ can supply electrical power to a 19.5-volt DC laptop or Windows 8 tablet using a proprietary stub cable. Targus offers ten tips for this cable—but while the dock supports Mac OS X, Targus can't offer tips for MacBooks because Apple won't license the MagSafe power connector. Targus doesn't offer iPad tips, either. In light of this limitation, MacBook owners should look at Targus's model ACP70USZ, which does not supply power but has everything else and costs $50 less.—MICHAEL BROWN

Targus ACP71USZ

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## Western Digital My Cloud

4½; starts at $150 (2TB); Western Digital; www.wd.com

WD's My Cloud hard drive connects to your network, so it's as secure as you can make it. But you can access it from the Internet—from a computer, smartphone, or tablet—and you can make user accounts for colleagues to access specific folders. You can also transfer files between the My Cloud and services such as Dropbox.

My Cloud's USB 3.0 port can host a digital camera (for direct file transfers) or a stand-alone USB hard drive. You can also back up your computer to the My Cloud over your network, and the drive supports Apple's Time Machine technology.

Installation is pretty much plug-and-play. In benchmark tests, the My Cloud posted very fast file-transfer performance, reading a 10GB collection of files at 29.9 MBps and writing it at 21.4 MBps. The unit handled a single 10GB file equally well, reading it at an impressive 79.4 MBps and writing it back to the drive at 62.1 MBps.

Because the My Cloud has a DLNA server and iTunes support, it can stream media to compatible entertainment systems. It cannot stream media to a client over the Internet, though, and WD doesn't provide BitTorrent support.

Relying on a single-drive NAS for backups or critical data is a little risky since you stand to lose everything if the device fails. WD mostly solves this problem with "safepoints," snapshots of the drive that you can keep on another storage device on your network or on a drive attached to the My Cloud's USB port. WD plans to offer two- and four-drive units down the road.

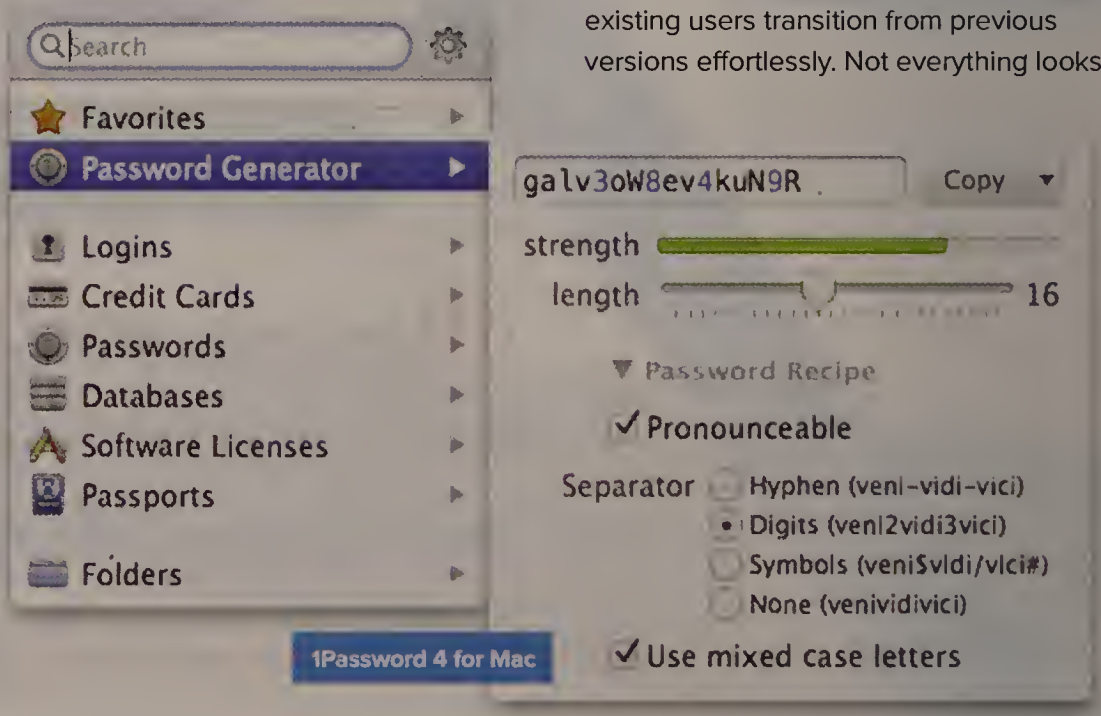
If you need storage that's available from just about everywhere, WD's My Cloud is a brilliant option.—MICHAEL BROWN

Software

## 1Password 4 for Mac

5; $40; AgileBits; agilebits.com

The new 1Password feels familiar and lets existing users transition from previous versions effortlessly. Not everything looks



the same: The program has received a fresh coat of paint, and slicker graphics inside and out. But what drives the new version is the recognition that security is a compromise between risk and convenience.

For example, the new 1Password Mini feature is a useful compact view into your password vault that installs in the menu bar. It gives you access to your saved credentials without your having to launch the main app, and it even allows you to "pin" an entry so that its window remains visible.

Version 4's browser extensions now display proper dialog boxes (instead of using tiny panels in the browser's chrome) to ask whether you want to inject usernames and passwords into a webpage, generate a new password, or save and replace an existing one. In demanding your attention this way, the app can more easily help you generate, save, and use the information you keep in its vault. These beefed-up extensions, combined with the app's enhanced ability to fill complex forms, are by far the most significant change that AgileBits has introduced.

The encryption uses a fairly secure AES-256 algorithm, backed by a new tamper-detection mechanism based on digital signatures.

Wi-Fi sync has returned to 1Password for Mac, so you can keep all your password data on a local network yet synchronize your vault across multiple devices.

Your syncing needs are likely to dictate where you purchase the app: Due to Apple's rules, you can use iCloud with 1Password 4 only if you buy the software from the Mac App Store.

Sure, 1Password 4 is expensive, but it's the only password manager among the half dozen I've tried in the past year that truly nails the balance between security and convenience.—MARCO TABINI

## Passwarden 2.0.1

♦♦♦; free (paid sync and storage packages available); DAR Software; passwarden.com

Passwarden promises to help you secure every last bit of sensitive information with as little complexity as possible. According to the makers, it stores data using an alphabet soup of encryption algorithms, such as the government-grade AES-256.

The app supplies templates for each kind of data; for example, Online Account records can cover social-network logins, Apple IDs, or email accounts. This approach helps you input details without confusing you with unnecessary fields.

The interface's lack of consistency and focus make it difficult at times to discover how the app works. On the good side, in addition to using the main window, you can use Passwarden via a systemwide menu, as well as from within Safari, Firefox, and Chrome browser extensions.

While the Mac and iOS apps are free to download, initially you can store only ten records for each device, and you can sync for only the first month. You can extend sync privileges and the number of records through in-app purchases, but to do so you have to choose from a confusing list of ten packages. The plans are reasonably priced: The most expensive costs $16.

Passwarden works well, offers a few interesting features, and had rock-solid performance and stability in my testing. With a little usability help, it could become a serious contender.—MARCO TABINI

# Playlist

Everything You Need to Know About iPods, iTunes, and Mac-Based Entertainment

## Ask the iTunes Guy

Restore album art on iOS devices, rename iTunes Radio stations, find missing podcasts, and more.

BY KIRK McELHEARN

Q&A This month, I cover questions about album art going AWOL on iOS devices, the iTunes Store app on iOS 7, gifting items from the iTunes Store, copying links to songs, and missing podcasts in iTunes 11.1.

**Q: A number of my album covers got scrambled in the move to iOS 7. Any ideas on how to fix this?**

**A:** The only solution I've ever found to troubles like this is a bit radical: Delete all the music on the iOS device and then resync the music.

To do so, connect the iOS device to iTunes, select the device, and click the *Music* tab in the header bar. Uncheck *Sync Music,* and click *Sync* near the bottom of the iTunes window. After the syncing is complete, recheck *Sync Music*—iTunes will remember your settings—and then sync again. This can take quite a while, especially if you use iTunes' feature that converts your music to a lower bit rate when syncing.

If you copy music manually to your iOS device, this technique won't work. Start by displaying the iTunes sidebar: Choose *View* → *Show Sidebar.* Then click the disclosure triangle next to the device's name, and click *Music.* Choose *File* → *Library* → *Export Playlist,* and save this playlist on your computer.

> Your gifting options from an iOS device are limited to complete albums, although you can gift almost any iTunes item—song, album, or movie—from a Mac or PC.

Next, choose *File* → *Library* → *Import Playlist,* and select the playlist you just saved. It will be added to iTunes. On your iOS device, select all the music you see when you click *Music,* and then press the <Delete> key; iTunes will delete the music. Find the playlist you imported, select all its tracks, and drag them onto the iPhone in the sidebar. iTunes will then copy all the music back (the operation could take a while if you have a lot of files).

Another method is to delete the iTunes Album Artwork Cache folder. You'll find this inside your home folder (the one with the house icon). Go to *Music* → *iTunes* → *Album Artwork.* Delete the Cache folder, quit iTunes, and then relaunch it. As you display music, iTunes will extract the album artwork from your files and create new items in the cache folder.

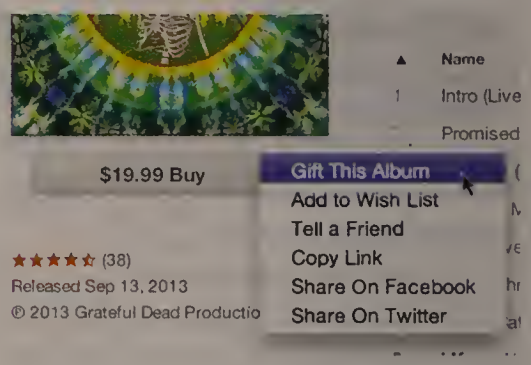
Don't delete the Download folder in the Album Artwork folder. The Download folder contains album artwork for iTunes Store purchases—artwork that isn't embedded in the actual music files.

**Q: When I play the Purchased playlist in iTunes, it also plays the videos in the playlist. Can I prevent that?**

**A:** The Purchased playlist is a list of items you've bought from the iTunes Store. But as with a regular playlist, you can delete anything you'd like to remove from it.

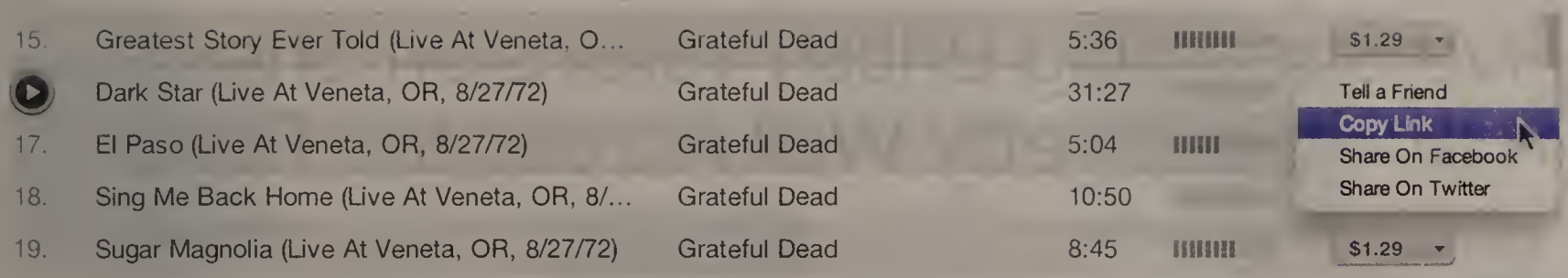
I have two solutions. The first is just to delete all videos from the playlist. Select them and press the <Delete> key. This will remove them from the Purchased playlist, but not from your iTunes library.

If you want to keep the videos in the




**Gifting** Using an iOS device, you can send an album from the iTunes Store as a gift.

ILLUSTRATION BY MICHAEL SLACK




**The Same Song** You can copy a link to any item on the iTunes Store to send it to a friend.

playlist, uncheck them. You'll see a little checkbox to the left of each one; click the box for each video—iTunes will skip them when you play anything from that playlist.

**Q: I want to gift my sister a song: How can I do that from my iPhone and the iTunes Store?**

**A:** Unfortunately, your gifting options from an iOS device are limited to complete albums, although you can gift almost any iTunes item—song, album, movie, or the like—from a Mac or PC.

On an iOS device, find an album you want to gift, and then tap the *Share* button. Follow the instructions to send the gift. In iTunes, click the arrow next to the price of any item and choose *Gift This Song*. Follow the instructions from there.

**Q: I recently updated my iPhone to iOS 7, and the iTunes Store app no longer works. How can I fix that?**

**A:** I had the same problem. The solution I finally found was to sign out of the iTunes Store and then sign back in. I did so in *Settings → iTunes & App Store*. After that, the iTunes Store app worked properly.

**Q: I have several friends in different countries. We all want to have the same song, but songs have different versions. How do I tell my friends how to find a song so that we have the same version? Is there an ID number?**

**A:** First, the song you want may not be available in all countries. If you click the arrow next to a song's price, you'll see *Copy Link* as an option in the pop-up menu. Select that, and you'll get a link that looks similar to this example:

*https://itunes.apple.com/us/album/dark-star-live-at-veneta-or/id680077190?i=680077232*

The bit that begins with *id* identifies the album; the bit after the ? is the song ID. Clicking the link will take you to the album on the Web. But if you click to view that track in iTunes, you'll just go to the album page in the iTunes Store. (The link will be for whatever country's store you were browsing when you copied the link.) That should be sufficient for what you need.

Alternatively, select the *Tell a Friend* option in the same pop-up menu. Then enter your friends' email addresses, and Apple will send them the link.

**Q: Is it possible to change the names of any of the iTunes Radio stations?**

**A:** The names of the Featured Stations—those atop the iTunes Radio window—are programmed by Apple, and you can't change them. But you can change the names of the stations you created. If you create a station from a song with a long name, such as "Half-Step Mississippi Uptown Toodeloo," you can shorten that name. To do so, click the radio station's icon in the iTunes window to expand the view. Click the name, and you'll see that it becomes highlighted. Type the name you want, and press <Return>. The new name will propagate to all your devices that are linked to your iTunes Store account.

**Q: I have a large library of podcasts, but after I updated to iTunes 11.1, many were missing. Can I get them back?**

**A:** A lot of issues with podcasts have come with the latest iTunes update. When I upgraded, some of my podcasts were visible, and others weren't.

The podcasts were still on my Mac, but iTunes didn't see them. If you have this problem, go to the iTunes folder in your home folder (it has the house icon, remember), open the iTunes Media folder, and then find the Podcasts folder. You can drag this entire folder onto the iTunes window, or drag the subfolders named for the "missing" podcasts. This should add them to your Podcasts library.

**Q: How does iTunes use the Album Artist tag versus the Artist tag?**

**A:** Some music has a principal artist, plus other musicians on certain tracks. Classical music, for example, may have an artist—an orchestra and conductor—and other artists on certain tracks, such as singers or soloists. You can put all the names in the Artist tag, and the name of the principal artist in the Album Artist tag. An album may have several artists, but the Album Artist name remains constant.

When iTunes displays music in, say, Albums or Artists view, it shows the Album Artist name next to the album name, and any individual artists below the track names.

**Changing Names** To change an iTunes Radio station's name, click the name and enter a new one.

# Five Streaming British Television Shows That Travel Pretty Well Across the Pond

BY JONATHAN SEFF

Something about the way Brits do TV can be as refreshing as a spot of tea. Here are five of my favorites from the UK, including recent additions to Hulu Plus.

## Coupling

*Coupling* (2000–2004) is a near-perfect sitcom that stands up nicely to multiple viewings.

It revolves around a group of six mostly friends with overlapping relationships, both past and present. Sort of like *Friends* but, you know, actually funny. There's the dumb-but-well-endowed Patrick, the reality-challenged Jane, Susan with her "affinity" for Australians, the master of foot-in-mouth disease Jeff, and so on.

True, some of the jokes don't migrate well; the final season also suffers from the loss of the hilarious Richard Coyle as Jeff. But I dare you to watch without a smile on your face. And you'll never hear the word *apparently* the same way again.

Stream the series from Netflix, Amazon Prime Instant Video, or Hulu/Hulu Plus.

## Jekyll

Robert Louis Stevenson's 19th-century novella *Strange Case of Dr Jekyll and Mr Hyde* has inspired many movie versions and TV shows over the years, but *Jekyll* (2007) is a contemporary retelling of the body-sharing tale that's full of twists and turns—all neatly packed into a six-episode series.

James Nesbitt plays Tom Jackman, the only living descendent of Dr. Jekyll and Mr. Hyde, who uses 21st-century technology—and a personal assistant—to keep his darker side from running amok or finding out that he has a family he's trying to protect. As you might expect, it doesn't work out as smoothly as he hopes; and there's this little matter of a shadowy organization with its own designs on Mr. Hyde.

The series is streaming on both Netflix and Amazon Prime Instant Video.

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### Life on Mars

In *Life on Mars* (2006–2007), John Simm plays Sam Tyler, a modern-day cop in Manchester who gets hit by a car and wakes up transported to 1973. It's a police procedural with a big mystery: Is Tyler mad, is he in a coma, or did he really go back in time?

Much of the fun comes from watching Tyler navigate an alien world without cell phones, computers, or rules for what the police are allowed to do to suspects. That last attitude is best displayed by Philip Glenister's Detective Chief Inspector Gene Hunt, one of the best throwback characters you could hope to find on TV, unabashedly kicking in doors and spewing the most un-PC speeches around.

*Life on Mars* also attempts to tie in both Tyler's childhood and his modern injured state with the storylines, and the show sometimes suffers in those strained moments. It's really at its best when it plays as a fish-out-of-water police drama.

All 16 episodes are on Hulu Plus.

### The IT Crowd

If you've ever needed tech support and found yourself greeted with the phrase, "Hello, IT. Have you tried turning it off and on again?" *The IT Crowd* (2006–2010) may be for you. Focusing on the small IT department of the nebulous Reynholm Industries, *The IT Crowd* features Chris O'Dowd (*Bridesmaids* and *The Sapphires*). His bored, lazy Roy plays nicely against Richard Ayoade's Moss, a socially inept tech nerd. Katherine Parkinson plays their completely untechnical boss, Jen, who has bluffed her way into the job. Brit-tinged comic genius ensues.

You can watch all four seasons of *The IT Crowd* on Netflix or Hulu/Hulu Plus.

### Blackadder

Rowan Atkinson (Mr. Bean) is excellent playing self-serving jerk Edmund Blackadder.

*Blackadder* (1983–1989) is actually four series that take place in four distinct eras. Atkinson plays the Duke of Edinburgh in the Middle Ages; Lord Blackadder during the reign of Queen Elizabeth I (who is played by Miranda Richardson); butler to the incompetent Prince George (a foppish Hugh Laurie) in the late 18th and early 19th centuries; and cowardly Captain Edmund Blackadder during World War I.

Although the periods may shift, the series has some constants. Edmund is a scheming, conniving weasel concerned only with his own success and well-being. It also has great characters (both Laurie and Stephen Fry play multiple roles).

The entire run, plus specials, is on Netflix, Amazon Prime Instant Video, and Hulu Plus.

# ROUNDUP: Four Luxury, Affordable Headphones

BY R. MATTHEW WARD

Headphones represent an affordable luxury. A set of world-class headphones can be had for as little as $300 or so.

The full-size, high-end headphones here, ranging in price from $310 to $400, are all supra-aural (over-ear), with closed (or sealed) designs to reduce external noise.

### V-Moda Crossfade M-100

The $310 V-Moda Crossfade M-100 continues V-Moda's streak of producing well-built, cleverly designed headphones. Two stout hinges let you fold the earpieces into the headband for travel. The headband adjusts in discrete but unmarked steps.

My review sample's matte-black design had a Batman level of cool; glossy-black and white-and-silver versions are also available. And though "built like a tank" may be a cliché, it describes the M-100's sturdiness. Hardware accessories include a $30 boom mic and a $30 coiled cable.

The M-100 sounds very good overall, with a low-end emphasis that doesn't overpower the midrange and treble, and with good detail.

This model is, on the whole, an amazingly well-designed product. Though its performance doesn't quite match that of the Sennheiser Momentum or the AKG K551 (below), its solid design, build quality, style, and accessories allow it to compete with them at its lower $310 price.

### AKG K551

AKG makes its $330 K551 available in either black or white, each with silver accents. The only accessory included is a small adapter.

The stainless-steel headband adjusts in discrete, numbered increments. A thin, black cable sports the small remote/microphone module. The K551's earpieces fold flat.

Thanks to its precision adjustments, the K551 creates a tight seal without clamping too strongly on your head; I found the earpads extremely comfortable to wear.

The K551 delivers a truly impressive amount of instrumental detail, and it sounds crystal clear.

To get your money's worth, though, you need to give the K551 some special treatment. Get a good fit, use the K551 with a headphone amplifier, a nice digital-to-analog converter (DAC), and some lossless-encoded files, and it'll sing.

### Sennheiser Momentum

Priced at $350, Sennheiser's Momentum has a leather-wrapped, stainless-steel headband; like those on the K551 and M-100, it could use more padding. The earpieces slide along a central channel in the headband to adjust the fit. Your color choices are brown and black; the latter adds red trim for a bit of edginess. The set doesn't fold for travel.

The Momentum sounds great. Though its presentation of detail doesn't quite achieve the world-class level of the K551, the Momentum beats its competition in the high-end, portable-style market. And it performs nearly as well with weak portable devices as with fancier sources.

### Velodyne vTrue

Unmistakably, Velodyne's "big bass without compromises" approach informs its $400 vTrue Studio Headphones. The company has other full-size models, but the vTrue is the company's flagship model.

The earpieces are made from forged aluminum, and they're gorgeous—but also quite heavy. The ample earpads and above-average headband padding reduce the impact of the weight, however, and the headphones' ergonomics are quite good.

Velodyne's two cables include one with a three-button remote/mic module; you also get a small adapter.

The vTrue offers a propulsive sound that makes music exciting and vibrant. And it does handle bass like no other headphones I've used.

## Affordable, Luxury Headphones At-a-Glance

| PRODUCT | RATING | PRICE | URL |
|---|---|---|---|
| V-Moda Crossfade M-100 | ★★★★½ | $310 | v-moda.com |
| AKG K551 | ★★★★★ | $330 | us.akg.com |
| Sennheiser Momentum | ★★★★★ | $350 | en-us.sennheiser.com |
| Velodyne vTrue | ★★★★½ | $400 | velodyne.com |

# Reviews

Home Entertainment Hardware, Software, and Accessories.

## Hardware

### Sonos Play:1

4½; $199; Sonos; sonos.com

With the Play:1, Sonos has added a smaller, less expensive speaker to its product line—one that makes a multiroom system easier on the wallet and fits in more places. It sounds pretty sweet too.

I tested out the Play:1 in my kitchen/living room area, as well as on my bedroom nightstand, with various types of music. In short: The Play:1 did a great job with pretty much whatever music I threw at it. The music can come from many sources, and the volume easily got loud enough to fill a fairly large room, undistorted.

One seemingly small, but quite helpful, feature here is that the Mute button found on other Sonos models has been replaced with a Play/Pause button. (Volume buttons are still included on the Play:1.) That means you don't have to reach out somewhere for your smartphone or tablet to start or stop the music.

With the new button, you can start playing whatever's next in your queue. A quick double-tap even advances to the next track. Genius! The Play:1 is a great gateway drug to the Sonos ecosystem. It's affordable and compact, it sounds good, and it includes all of the capabilities and streaming options available to the other speakers. And for a user like me, it makes expanding the Sonos experience to other parts of the house more palatable. —JONATHAN SEFF

### Iogear Wireless 5x2 HD Matrix

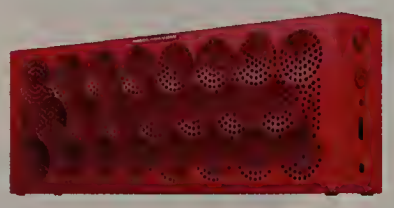
4½; $400; Iogear; iogear.com

Most wireless HDMI devices are short-range products because they use the 60GHz spectrum. Iogear's Wireless 5x2 HD Matrix uses the 5GHz spectrum, and its signal can penetrate a few walls—ideal for actual home usage.

With the 60GHz systems I've seen, the transmitter and receiver must be in the same room. IOGear's HD Matrix, which is based on the WHDI (Wireless Home Digital Interface) standard, can handle both same-room and multiroom streaming. It can also send control signals from its receiver back to the devices plugged into its transmitter.

The 5x2 in the name refers to the fact that the transmitter has five inputs (four HDMI and one analog component video plus stereo) and two outputs (one wired HDMI and one wireless HDMI). The system's transmitter and receiver can switch sources independently: A TV plugged into the receiver can play video from the Blu-ray player, while the television connected to the transmitter plays video from a cable- or satellite-TV set-top box, say.

Though the Iogear Wireless 5x2 HD Matrix is a little pricey at $400, and though it can't stream an HD soundtrack, I'm still impressed with its performance, range, and ease of setup.—MICHAEL BROWN



### Jawbone Mini Jambox

4½; $180; Jawbone; jawbone.com

Jawbone's $180 Mini Jambox portable Bluetooth speaker is taller than the original Jambox, but it's still much smaller overall, and it costs the same.

Anyone considering the original Jambox should buy the Mini Jambox instead. The Mini sounds a whole lot like the original version, with no big trade-offs—and it's much more portable, to boot (it weighs only half a pound).

The top edge of the Mini Jambox hosts three buttons: play/pause, volume up, and volume down. One decided improvement over the original Jambox is the Mini's addition of two tiny feet that help to keep it affixed to whatever surface it's on.

While not made for multiroom parties, the Mini Jambox is a delightful little speaker: bright, clear, and punchy.

If you already own a Jambox, you don't need the Mini. But if you crave portability and battery power, and are willing to sacrifice bass and volume for them, the Mini Jambox is a solid buy.—LEX FRIEDMAN

## iPods: Current Lineup

| PRODUCT | SPECS | RATING | PRICE[1] | DISPLAY | MORE INFO |
|---|---|---|---|---|---|
| iPod Classic | 160GB | 4½ | $249 | 2.5-inch color | go.macworld.com/classic2 |
| iPod Touch 5th Generation | 16GB | 4½ | $229 | 4-inch color (Retina) | go.macworld.com/touch516 |
| | 32GB | 4½ | $299 | 4-inch color (Retina) | go macworld.com/touch5 |
| | 64GB | 4½ | $399 | 4-inch color (Retina) | go.macworld com/touch5 |
| iPod Nano | 16GB | 4½ | $149 | 2.5-inch color | go.macworld.com/nano7 |
| iPod Shuffle | 2GB | 4½ | $49 | None | go.macworld.com/shuffle4 |

[1]All prices are Apple's prices.

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# Create

Using the Web for Video, Graphics, Publishing, Photography, and Other Creative Pursuits

# Apple Updates iLife

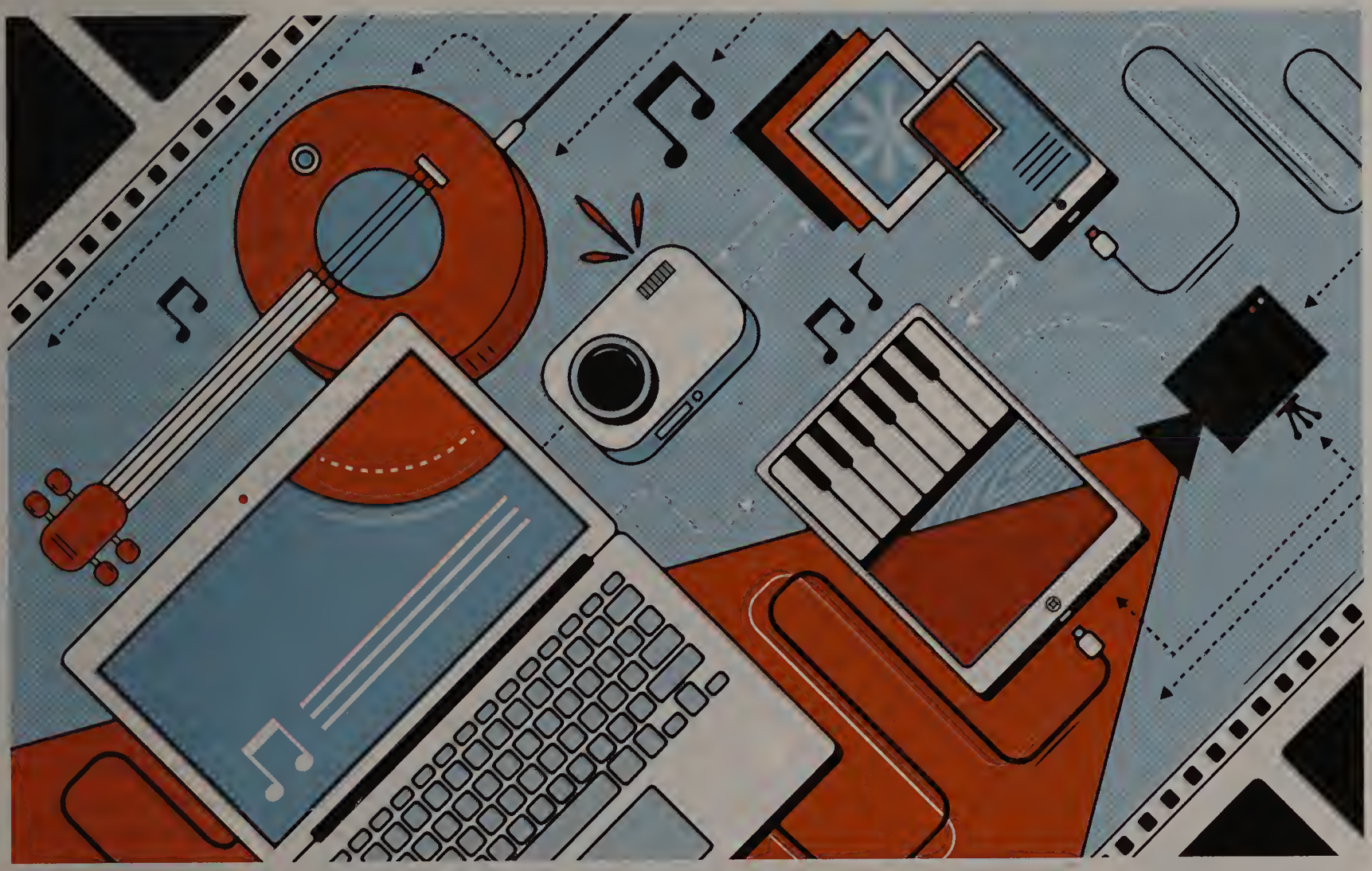


ILLUSTRATION BY SHAW NIELSEN

Debuting with the Mavericks and iOS 7 operating systems for Macs and Apple mobile devices are new, free versions of Apple's creative desktop and mobile apps for photography, video, and music. Updates of iPhoto, iMovie, and GarageBand are compatible with the new OSs, and the changes span quite a range.

For the desktop apps overall, the new setup remains fairly similar to the old. iPhoto 9.5 has numerous incremental, under-the-hood updates. iMovie 10 retains many advanced features from earlier versions, adds more, and offers a clean, clutter-free interface. GarageBand 10 provides familiar features from Logic Pro X, but removes popular podcasting tools.

The debut of iOS 7 made mobile app redesign more visually urgent for the new iPhone and iPad versions. Despite iPhoto's new iOS-inspired interface, however, the app offers many of the same features as before. The same mostly holds true for the new mobile versions of iMovie and GarageBand. iMovie for iOS is now a little simpler and easier to use. GarageBand offers the same features as the original, and it supports more tracks, inter-app audio, and AirDrop. But the free version has dropped some sounds and instruments.

Here's a look at the new iLife apps.

# iPhoto for iOS and OS X: Two Paths

The mobile version of the app introduces major visual changes; the desktop version looks much as before.

BY JACKIE DOVE

**Hands-On** Apple has recently updated its signature consumer photo-editing and photo management software—the desktop iPhoto for Mac (go.macworld.com/iphotomac64) and the mobile iPhoto for iOS (go.macworld.com/iphotoios64), which is for both the iPhone and the iPad—with enhancements to emphasize iCloud integration and 64-bit compatibility. The move accompanied the unveiling of OS X 10.9 Mavericks. Though Apple has been more active on the mobile side of iPhoto in recent years, the Mac version, now sharing a database with Aperture (go.macworld.com/aperture33), remains the undisputed Mac-based photographic hub.

iPhoto for iOS debuted last year with much fanfare, and for good reason. Though the beautifully rendered app wasn't identical to its counterpart for the desktop, it offered many analogous capabilities. In some ways the mobile app—universal for both the iPhone and the iPad—had an even more elegant and modern interface than the desktop version. And because users could control it with on-screen gestures, operating the program was straightforward.

Ironically, the opposite holds true for the desktop version of iPhoto, now at version 9.5. You get this version only when you upgrade to Mavericks. The desktop app has a few significant new capabilities, but its overall look and feel are very similar to the iPhoto 11 everyone already knows.

> The overhaul of the previous version has altered the interface's design to such an extent that the upgrade almost seems like a brand-new app. But not quite.

In developing iPhoto for iOS 7, Apple didn't exactly reinvent the wheel, but the overhaul of the previous version has altered the interface's design details to such an extent that the upgrade almost seems like a brand-new app. But not quite.

## iPhoto for iOS

Major components of iOS 7's new iPhoto for iPad and iPhone, now at version 2, are comparable to elements in the previous version. The opening interface presents choices for adjusting columns of photos, leaving you more or less room to work on your central image. The icons have been updated, streamlined, and reduced in size—iOS 7–ized into thin, discrete precision drawings—but the functions that they represent remain largely unchanged.

Browse, Crop, Exposure, Color, Brushes, and Effects are all present, though the presentation of some of the settings seems a little less charming and whimsical in the current version. Call it skeuomorphism if you want, but I liked

**Image Friendly** iPhoto for iOS 7 has a simple, elegant interface.

**Shot Tagging** In addition to new shared photo streams, iPhoto has a new built-in utility for geotagged images (as seen in this desktop version): Apple Maps.

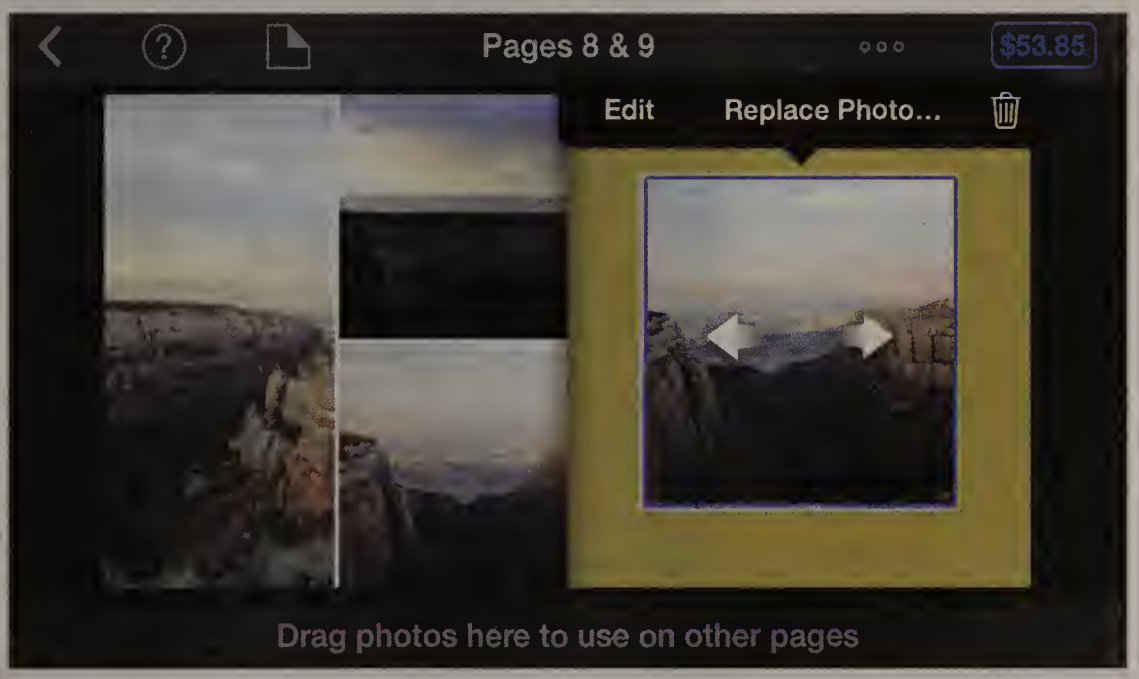
the animated iOS 6 effects fan and the brushes spread: It captured my eye and made me smile—it was so...Apple. The iOS 7 interface is lovely, but with a more reserved personality. Happily, it operates for the most part the same way as before, with a full complement of streamlined commands.

Interface aside, iPhoto for iOS does have some new features on tap for users who are considering an upgrade. With this version you can order prints in various sizes directly from the app and create hard-copy printed photo books from the Share tab. Among the newly added filter effects are Camera Filter and Drama. You can reach all options without formally switching modes, but it took me a few taps to figure out how to break free from the editing functions to find the main categories (Photos, Albums, and Projects). Hint: You must use a small arrow icon on the upper left—one of the few icons not specifically labeled by the on-call, tap-activated, exhaustively detailed help system.

The book-ordering prep and process on mobile devices proved intuitive. You can choose images ahead of time or as you go. In addition, you can interactively adjust the content of books as you build them, changing the number of photos permitted on a page, adding and removing pages, and swapping out background colors.

## iPhoto for Mac

Upon launching iPhoto for Mac in Mavericks for the first time, I actually did a double-take and had to check the version number to make sure that I had opened the upgraded program—it looks that similar to the previous version. Most of the improvements, starting with 64-bit support, are under the hood.




**Phone It In** iPhoto for iOS 2 lets you build and order a book on your iPhone—swapping, editing and resizing images from within the template.

Nevertheless, a closer examination of the interface reveals that the Create tab has been replaced by a Share menu where the program gathers such varied features as photo printing and iCloud sharing, along with the familiar options to build photo books, greeting cards, calendars, slideshows, and albums. Another change: The Places feature now uses Apple Maps, which hopefully signals a much improved product in Mavericks; I found the geotagging on images from my iPhone to be mostly accurate.

Aside from incorporating a generous (and welcome) collection of bug fixes, the Mavericks version of iPhoto has relatively few new features. One new feature is that, if you are into Cloud-based photo sharing, you now have the option to post videos to shared photo streams and have friends and family contribute as well.

The more radical revision of iPhoto has occurred in the iOS version of the app, where the changes are largely visual. Old hands with the Mac program will find their way around as they did before.

# iMovie for Mac and iOS: Major Upgrades

The newest version of Apple's consumer filmmaking software has plenty of features to like.

BY SERENITY CALDWELL

**Hands-On** Apple's consumer filmmaking software, iMovie, has gotten its fair share of praise and scorn over the years. The company's newest desktop and mobile versions aren't perfect, but there's plenty to like about them. Here are some of the best new features in iMovie for Mac and iOS.

The interface is wonderful—and it's seamless across Mac and iOS operating systems: This version of iMovie can stand proudly next to its pro sibling, Final Cut. Though its feature set pales in comparison to the options in Final Cut, it does pack a decent number of tools in its toolbox, and it has the same "space gray" color-ation and timeline handling.

Unlike in previous iMovie versions, however, those tools are secreted away behind reassuringly simple-looking buttons that won't scare off casual filmmakers or beginners. You don't even have to make a project if you just want to find and share a certain clip.

On the Mac, Apple has replaced iMovie's myriad buttons and shiny aluminum textures with four sections: a sidebar for accessing your photos, video, projects, and content library; buttons for importing video, creating new projects, and sharing clips/projects; a tab switch for jumping between iMovie's Library screen and iMovie Theater; and two editing buttons (Enhance and Adjust). That's it.

**Simplify, Simplify** The new iMovie interface for Mavericks won't overwhelm new users.

## Three Main Categories

The iOS 7 overhaul splits the app into three parts: Video, Projects, and Theater. The Video screen is your Library equivalent, displaying one big clip amid tiny timelines of other clips in your camera roll. Projects and Theater display your in-progress timelines and finished videos.

Multilayer editing is easy in both Mac and iOS versions. Forget any notion of advanced tools in iMovie for Mac: You don't need to find a checkbox to make complicated changes. Want to drag one clip on top of another, so they stack? No problem. Alter the styling from a straight cutaway to a picture-in-picture, side-by-side, or green-screen matte? You got it.

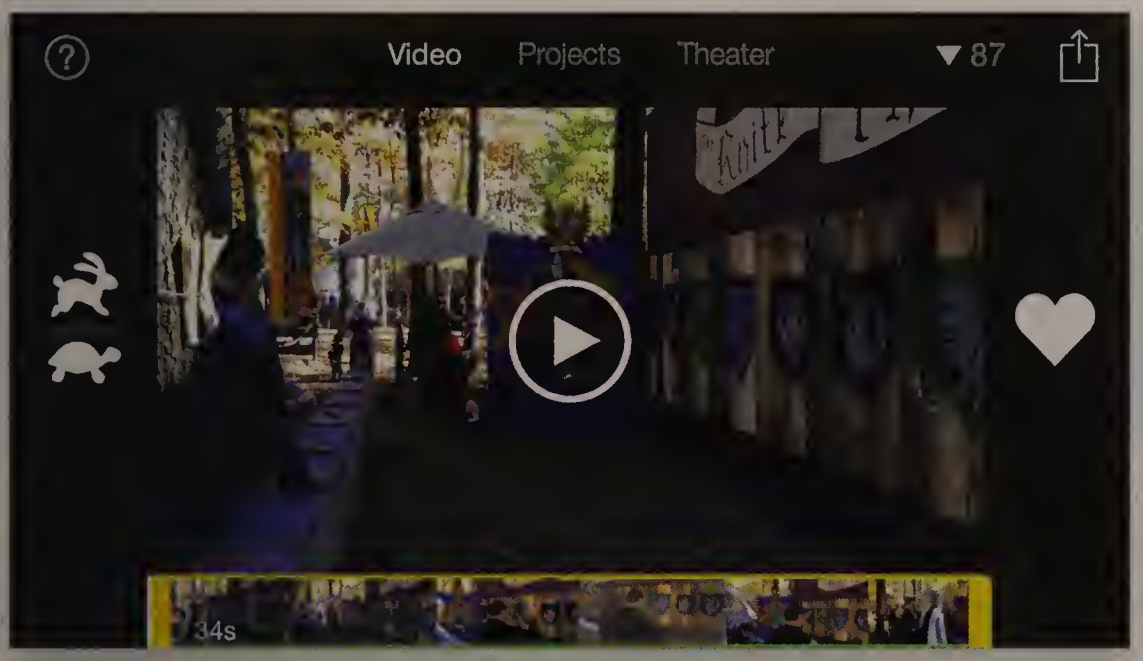
Here's an even cooler option: When you drag a clip below another clip, it instantly converts to an audio-only soundtrack. On iOS, this is slightly more difficult, as you can't drag clips on top of each other. But you can still get picture-in-picture or overlay options for clips—you just have to import them. After importing the clip, you can move it anywhere on that second line, but you can't drop it back into the main timeline.

## Sharing and iMovie Theater

You can use the program as a one-stop sharing station. Past versions of iMovie were great for many things, but quickly sharing clips was not one of them. Now, on the Mac, greatly simplified export controls offer you eight types of sharing (including sharing via iMovie Theater, via email, via YouTube, and to your Desktop), each with its own painless menu.

The nicest thing about the ever-present Share button is its flexibility. You can send an original or altered clip, a final project video, or even the project itself to a number of sources. And this capability carries over to iMovie on iOS—the Video section of the app offers easy sharing, and you can even apply speed modulation on the spot.

iMovie Theater in both Mac and iOS versions is a great gimmick. For quickly sharing video on a TV or other device, iMovie Theater is stellar. You can cut something on your Mac and push it to your iOS device, and from there you can show it off wherever you want. You don't even have to download it to your device—by default, iMovie Theater stores every-




**Quick Clips View** Video mode in iMovie on iOS displays a row of filmstrip clips for easy viewing.

thing on its server, so you can stream it (if you have a data connection) or you can download it ahead of time.

iMovie Theater does have a few limitations. Unlike with Photo Stream, any video you share counts toward your iCloud storage limit; so if you're working with the default 5GB of storage, you may soon find yourself running out of room. Another restriction is that, if you reexport a project video, it appears as a duplicate, rather than replacing the old version. And perhaps most annoyingly, you can't share projects—only final videos.

Clip importing is faster and simpler on the Mac. In comparison to the new version, the speed optimization in iMovie '11 feels archaic. Gone from the revised import process are the 'analyze for stabilization' and 'optimize video size' options, the 'import selected' checkboxes, and any extra nonsense you might have had to click through before being able to edit your clips. The new version of iMovie treats you with genuine respect.

Do you want to import all your clips? Great. Want to import just some of them? Highlight the ones you want, and press *import*. The current version of the app is so much faster than its predecessor that it doesn't require you to downscale your HD clips before you can edit them.

Once you've imported your clips, you can search through them by name or date, tag your favorites, and sort the whole collection by favorites or by rejected clips. The process is far less complex than in Final Cut, with its tagging options; and organizing feels quick and painless.

**Slo-Mo Scrubber**

Given the iPhone 5s's emphasis on slow-motion video, it's no shock to see the OS X version of iMovie introduce enhanced slow-motion controls that are incredibly easy to apply. By default, iPhone 5s clips captured at 120 frames per second are slowed down automatically; and once in the timeline, the new speed bar lets you speed up or slow down a clip by dragging a handle. You can also click the speed bar to get inline information about various speed modulations you can perform, or you can click iMovie's modify menu.

Given how easy it is to drag the speed bar, I'm disappointed that the app offers no way to set in and out points on the speed, à la the 5s's Camera app. Instead, you have to slice up a slow motion clip manually, and then speed up the clip on each side of the slo-mo section to get a similar effect. Even then, you don't quite achieve the same ramping effect that you'd get with the Camera Roll on iOS.

Many other great features are offered in both versions of iMovie, including a prominent (and convenient) undo button, background tasks and rendering on the Mac, and such iOS-only elements as a quick clips view, pinch-to crop video, advanced audio fine-tuning options, and transferring projects via AirDrop. Give it a try and see how many you can find.

**Slow and Go** iMovie lets you set the desired replay speed for a slo-mo clip.

# GarageBand for iOS and OS X: Power Up

The upgrades support more tracks and add features such as a configurable Drummer track in the OS X app.

BY CHRISTOPHER BREEN

**Hands-On** Of the three creative iLife applications for OS X and iOS—iPhoto, iMovie, and GarageBand—that Apple refreshed this fall, the last is of special interest to me because I'm a musician in my off hours. So I was quick to volunteer my services in evaluating the various features that the new GarageBand has to offer. Here are my first impressions of each version.

### GarageBand for iOS

For users who have never purchased GarageBand for iOS, the 2.0 version is free but lacks some of the sounds and instruments found in the previous version. (It also requires iOS 7.) With a $5 in-app purchase, however, you can have all the features of the previous version, plus a few extras. Users who have previously purchased GarageBand get everything with the update.

The features that Apple offers in the iOS version of GarageBand have changed very little. Graphics are "flatter" to conform to iOS 7's design, but as you tap through its menus and instruments you'll find the same features that were in the original version. It's not identical, though.

> The choice to upgrade from an older version is easy. When you upgrade, the older version stays on your Mac and is renamed GarageBand 6.0.5.

Thanks to under-the-hood changes it now supports more tracks. On a compatible iOS device with a 32-bit processor (iPhone 4 or later, iPad 2 or later, or fifth-generation iPod touch), the app supports up to 16 tracks versus the 8-track maximum you were previously limited to. And if you're working with a device that carries a 64-bit processor (iPhone 5s, iPad Air, and iPad mini with Retina display), you can create as many as 32 tracks.

The updated GarageBand for iOS app supports inter-app audio, too—which means that you can incorporate instruments or effects (such as the sound from

**Beat Manifesto** A $5 in-app purchase adds 14 drummers with different styles to the OS X app.

**GarageBand's** Drummer track is lifted from Apple's Logic Pro X.

a third-party virtual synthesizer app) from another app into your GarageBand projects. In the past, this cross-app option was available only if you used a third-party app designed for the purpose, such as Audiobus (audiob.us).

GarageBand for iOS supports project sharing via AirDrop for iOS, and you can upload your songs to iCloud. You can also import tracks from your Music library into the Sampler instrument and then modify those tracks with the Sampler's controls.

## GarageBand for OS X

The latest release of GarageBand for OS X (Mavericks required) gives here and takes away there. On the giving side are a number of popular features found in Apple's professional digital audio workstation application, Logic Pro X (go.macworld.com/logicprox).

What the company removes are the tools that podcasters depended on. Though you can record audio tracks that might be included in a podcast, the dedicated Podcast track, podcast vocal effects, and chapter and embedded links features used in enhanced podcasts are gone. The Magic GarageBand feature has vanished, too. On the other hand, the ability to import video into a dedicated Movies track remains.

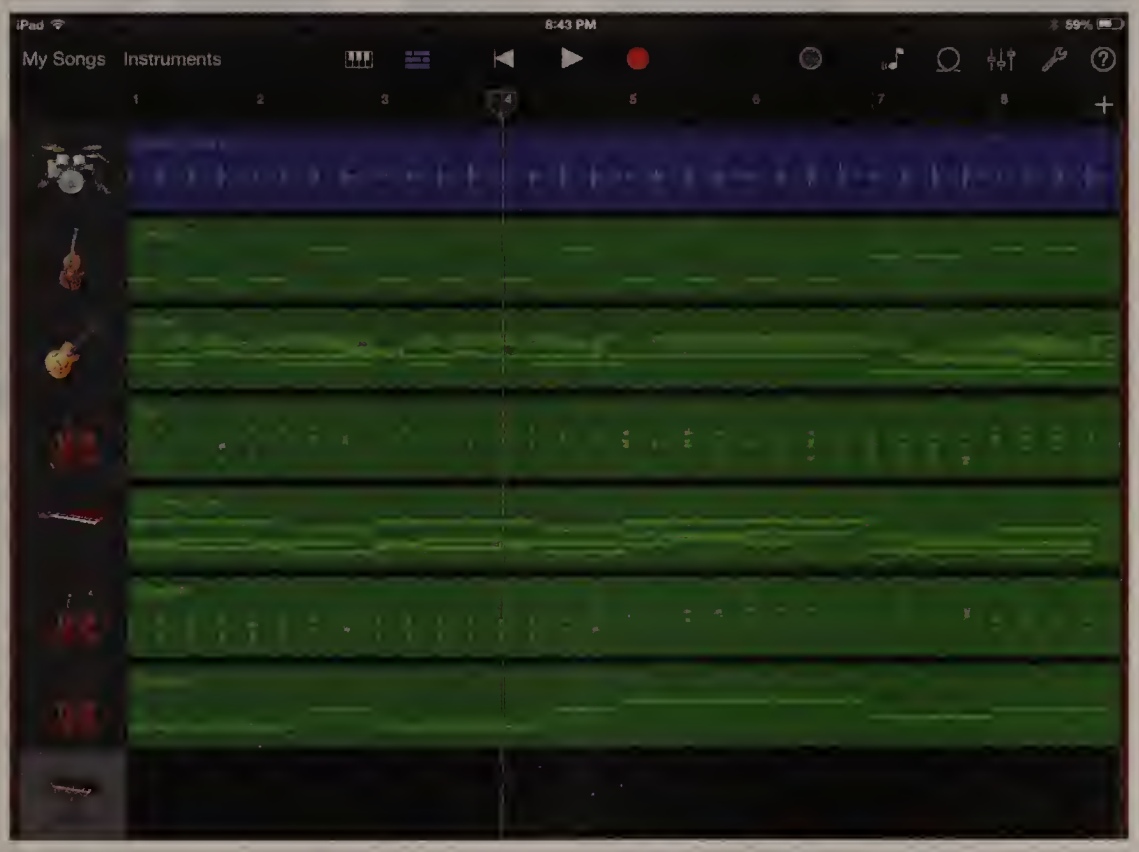
As with the new GarageBand for iOS, if you haven't previously owned a copy of GarageBand on your Mac, the free version available for you to download lacks some extras (in the form of additional loops and sounds) and doesn't provide access to the GarageBand Lesson Store. A $5 in-app purchase fetches you those extras. Also, in the free version you get just one drummer in the app's new Drummer track.

Drummer track? Yes. This feature puts a virtual drummer at your disposal. (The free version has just the one rock drummer, Kyle. The in-app purchase provides 14 additional ones that play in different styles.) The Drummer track is easy to configure, and it allows you to make the drummer's work more or less complex as well as letting you configure which drums and percussion instruments he favors.

Also from Logic are Smart Controls—instrument controls that musicians are already familiar with. If you choose a vintage B3 organ, for example, you'll see the same drawbars and switches that you'd find on these instruments, rather than generic sliders and text fields. Choose an electric guitar and you'll find gain, tone, delay, boost, and reverb knobs.

The previous version of GarageBand included guitar amps and stompboxes. Bass players now get amps of their own. These string pluckers will find that the application's tuner is more accurate, too.

Other new features include a redesigned interface that bears the dark gray look of Apple's pro applications; new loops and sounds drawn from the Logic library; support for saving songs to iCloud; and the ability to control GarageBand with the free Logic Remote iPad app.




**Flat Looks Sharp** GarageBand for iOS's interface fits right in with iOS 7's distinctively 'flat' design.

The decision to upgrade from an older version of GarageBand should be easy. When you upgrade, the old version stays on your Mac and is renamed GarageBand 6.0.5. If you become dissatisfied about not being able to create podcasts in the newest version, or if you find yourself missing the Magic GarageBand tool, you can always switch to the older version.

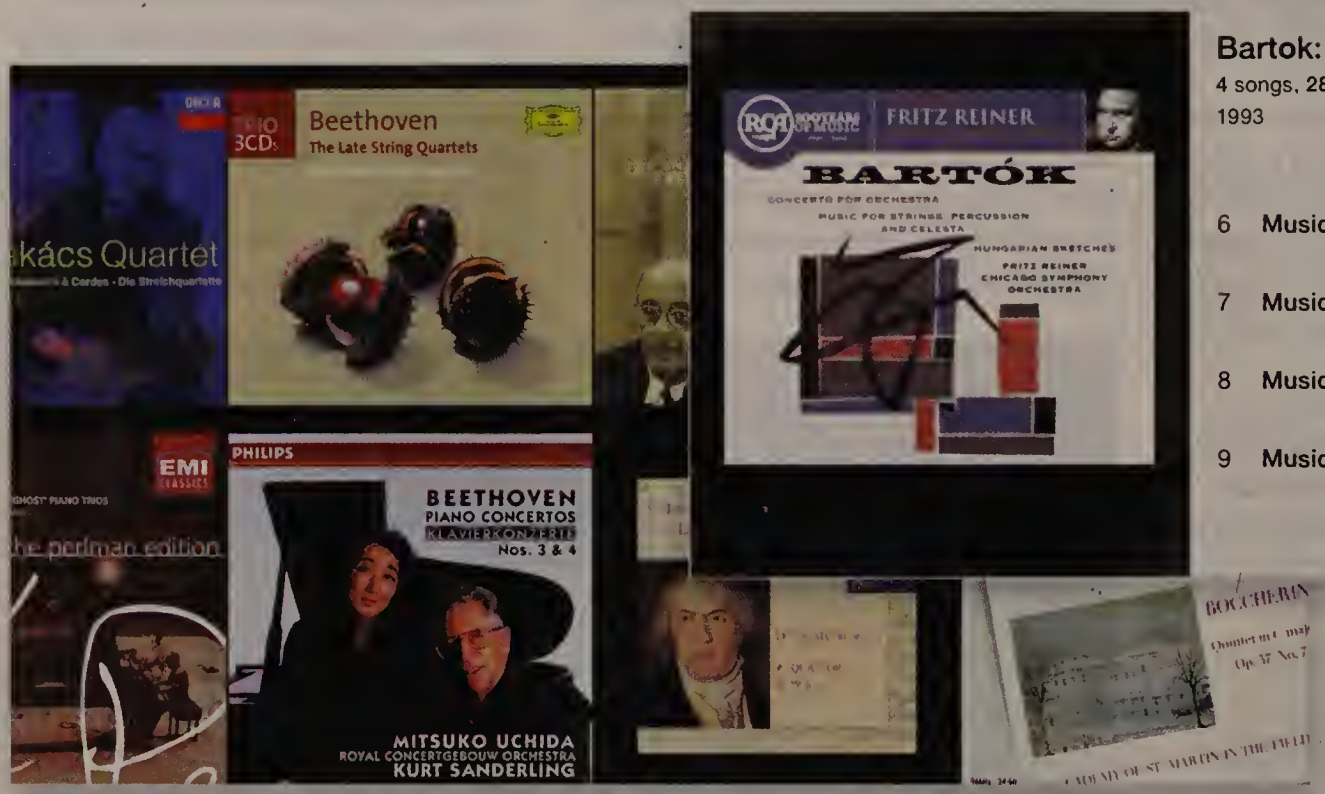
# Help Desk

Answering Your Questions and Sharing Your Tips About Getting the Most From Your Mac

## Mac OS X Hints

The insider tips you won't get from Apple.

BY LEX FRIEDMAN




**Musical Arrangement** In the iOS 7 Music app's interactive grid of cover art, you can tap an album to see it in detail.

### Pinch and Zoom the Cover Art Album Browser in the Music App

When you turn your iOS 7 device to landscape (horizontal) mode in the Music app, you get a lovely grid of album cover art from the music in your library. You can tap a cover to see that album in detail, but you may not realize just how interactive that grid is. You can swipe across it to drag other covers into view. Even better, you can pinch and zoom to change how many album covers fit onto the screen at a time, to see more covers at once.

### See Timestamps in iOS 7 Messages

The Messages app in iOS 7 doesn't introduce much in the way of new functionality from iOS 6, though it does sport a dramatically different look. While iOS 7's Messages shows timestamps in between conversations, sometimes you might want to know precisely when a given message arrived. You have an easy way to find out: Swipe across a conversation in Messages from right to left. As you drag, you'll reveal per-message timestamps. They slide away as you release your finger.

### Delete or Forward Individual Texts in iOS 7 Messages

Back in the iOS 6 Messages app, you could tap the Edit button to delete or forward one or more messages from a text/iMessage conversation. The iOS 7 Messages has no Edit button, but here's the workaround: Tap and hold (or double-tap) any speech bubble in your conversation. In the pop-over menu, tap *More* to enter editing mode. Select messages by tapping the round checkboxes ("check-circles"?) that appear alongside them, and tap the trash-can icon at bottom left or the forward button at bottom right. At the upper left is the Delete All button, which lets you wipe out the entire conversation history from this editing mode.

### Show Full Names in iOS 7 Messages

iOS 7's redesign seems to cause spacing issues in Messages, especially on the

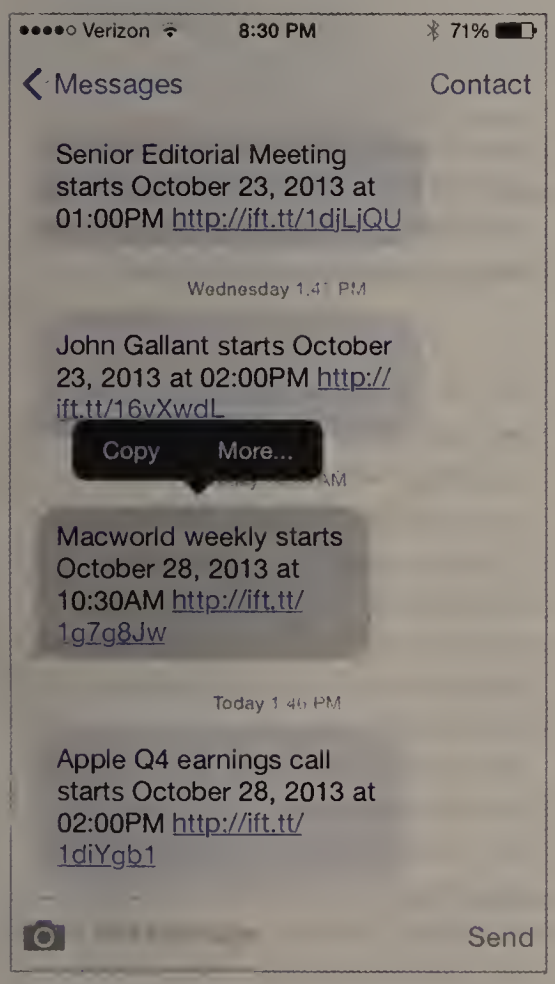
Sometimes you want to know precisely when a given message arrived. You have an easy way to find out.

iPhone. Previously you could see the full names of the people you texted in the header, but iOS 7 shows only a first name, or perhaps a first name and a last initial. When you know as many Dans as I do—even as many Dan M.'s as I do—that won't suffice. There's a fix: In the Settings app, tap *Mail* → *Contacts* → *Calendars* and scroll to the Contacts section. Under that header, tap *Short Name*. For my purposes, I turned off both Short Name and Prefer Nicknames. Now, Messages shows the full names of the contacts I'm sending messages to, shortening the button labels at the top as needed to make everything fit.

### Review Cellular-Data Usage by App in iOS 7

One powerful new feature in the Settings app allows you to see how much data your apps are consuming over your iPhone's cellular connection. You can even block specific apps from accessing data over your cellular connection, limiting them to Wi-Fi data access. To find the options, launch Settings and tap *Cellular*. Scroll down past the Personal Hotspot, Call Time, Cellular Data Usage, and other options, and you get to the Use Cellular Data For section.

The list is sorted alphabetically, unfortunately, and not by cellular data consumption. But you can see how much data each app has used over the iPhone's cellular connection, and you can use the green toggle to disable certain apps from consuming cellular data at all. You also can tap *System Services* to see how much cellular data is used by system components that you can't prevent from using the cell connection, such as DNS services, Time & Location, Siri, mapping, and networking. You can reset the statistics with a button at the bottom of the screen.




**Hidden Editing** Tap and hold a message and then tap 'More' to access editing mode.

### A Collection of Siri Hints for iOS 7

**Use Siri to adjust brightness:** Siri can toggle a lot of settings in iOS 7, including Bluetooth, Airplane Mode, and Wi-Fi. The virtual assistant also gives you quick access to more granular settings. Tell Siri something like "Change the brightness," and the brightness slider will appear, ready for you to adjust. You could always drag up Control Center instead, but who doesn't like a virtual minion to do their brightness-adjusting bidding?

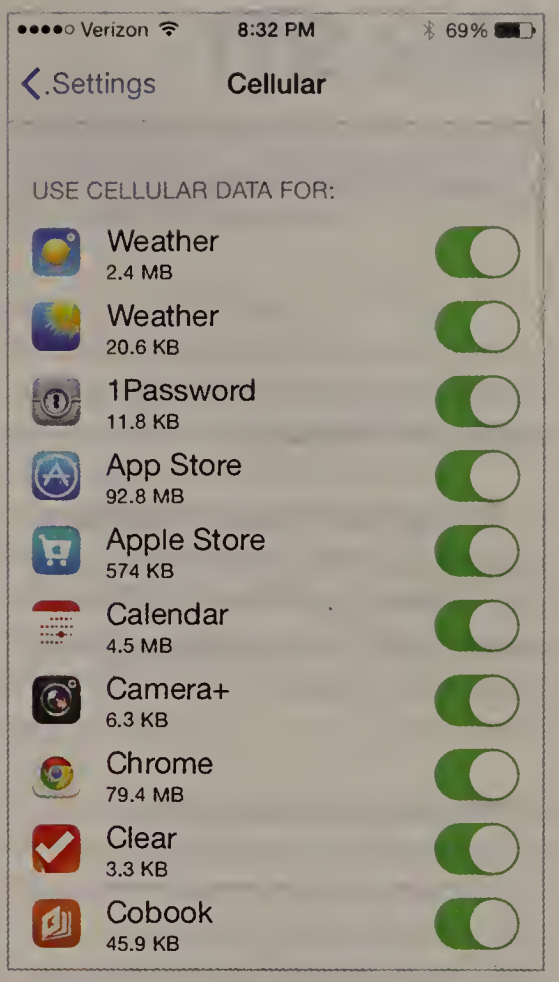
**Roll the dice or flip a coin:** Siri can help you play games of chance—though it can't necessarily help you win at said games. Say "Flip a coin," and Siri will announce heads or tails. Say "Roll the dice," and you'll get a pair of numbers between one and six. You can't ask Siri to roll a single die. (Or rather, you can, but you'll still get two numbers back.)

**Get random stuff from Siri:** Thanks to Siri's integration with Wolfram Alpha, you can get random data. Say "Random number" (which Siri interprets as "Random integer"), "Random integer," or "Random real." You can specify ranges, as in "Random integer between 10 and 100" or "Random real between 20 and 30." Language-based randomness is an option, too: Try "Random word" or "Random letter."

### Use TextEdit in Full Screen Mode

For a column called *Mac OS X Hints*, we sure ran a lot of iOS 7 hints this time. But we'll leave you with one swell hint that's just for the Mac. Fans of Apple's TextEdit app may be annoyed by its lack of support for the Full Screen mode introduced in Mountain Lion. Apple released TextEdit's source code publicly; it serves as an example project for developers learning Xcode. If you have Xcode installed, you can compile a version of the app with native Full Screen support.

Open TextEdit.xcodeproj in Xcode, look for the Interfaces folder on the left, and select the file *DocumentWindow*. Then, select the window; make sure to select the window itself, not one of the objects it contains. On the right side of the screen, you can see the different inspectors that Xcode provides. Select the fourth, *Attributes*. A lot of changeable attributes of the window are available, but you're looking for *Full Screen Support*. Change that setting to *Primary Window*. Build and run the application. Full Screen support now works! To get the finished, executable application, find TextEdit.app in the Products folder, right-click it, and select *Show in Finder*. You can move it or copy it to a location of your choice.




**Avoid Caps** Check how much cellular data your apps are using, and turn usage on and off.

# Mac 911

Solutions to your most vexing Mac problems.

BY CHRISTOPHER BREEN

## The Case of the Missing Apple TV Movies

**Q: After a recent update, I switched on my Apple TV, prepared to watch a movie I had ripped from a DVD I own. All my ripped movies are gone! What happened to them?**

via the Internet

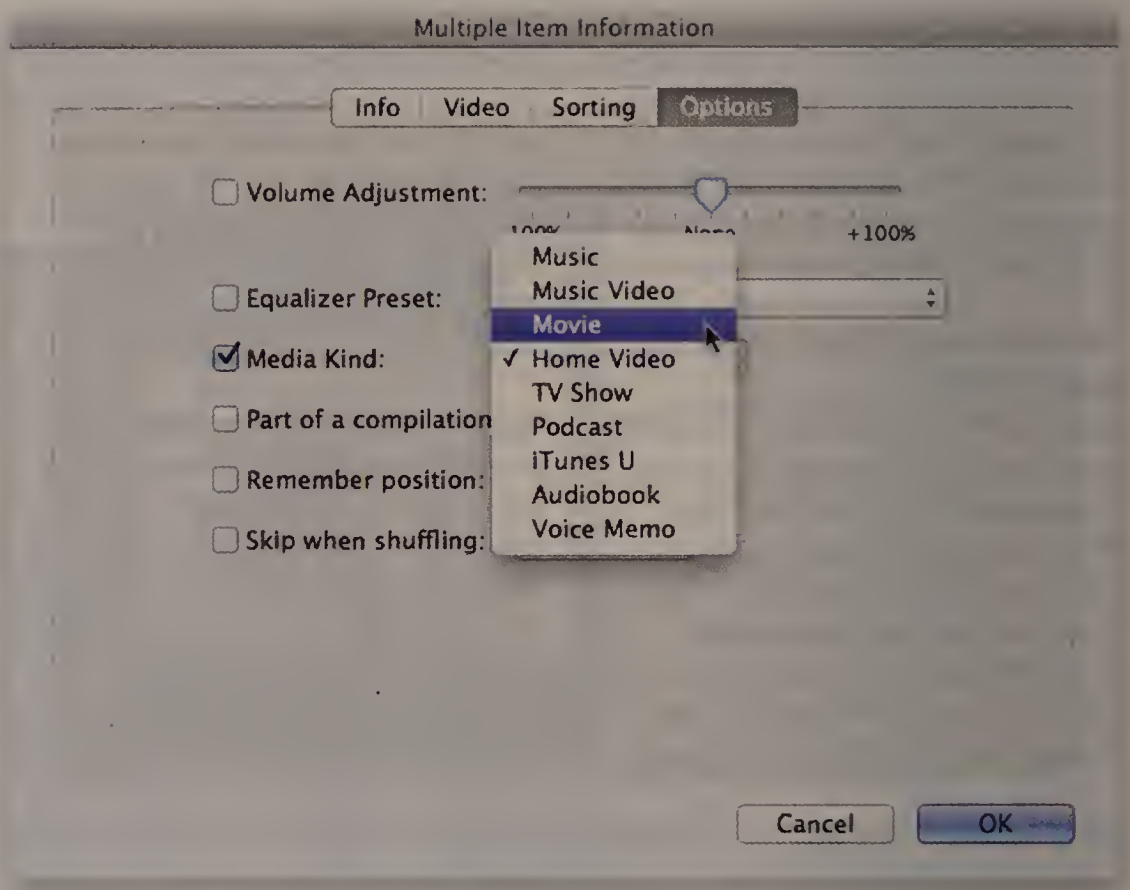
**A:** With the latest version of iTunes and the Apple TV, Apple categorizes such movies (and any sort of video that you didn't obtain from the iTunes Store) as home videos. When you select *Computers* on your Apple TV, you will see a *Home Videos* entry as the fourth item in the media list. If you select that item and press the remote's Select button, all your ripped movies should appear.

If, like me, you find it a bit silly to separate your Apple-purchased movies from those you've ripped (and yes, you should rip only those discs that you own), you can correct the behavior easily. To do so, you need to change the media type for the affected files from Home Video to Movie. You have a couple of ways to accomplish this in iTunes.

The first is to select *Movies* in iTunes, click the *Home Videos* heading in the main window, select everything listed in that window, press ⌘-I, click the *Options* tab, choose *Movie* from the Media Kind pop-up menu, and click *OK* (see "Changing a Movie's Media Kind").

I find this method a little clumsy, though, because you may have shorter movies—videos of the family that you've created with iMovie, for example—that really are home videos. Use the method I just described, and that stuff gets mixed in with your Hollywood hits.

What I suggest instead is that you choose *File* → *New* → *Smart Playlist*, and in the window that appears configure the one and only condition to read *Media Kind Is Home Video* and click *OK*. You'll see a list of all the videos in your iTunes Library tagged as home videos. Now click the *Time* column heading twice, and the movies with the greatest length will appear at the top. These items are likely to be the movies you ripped rather than the video clips of your kids bombarding one another with water balloons. Select these videos and then run through the procedure I just outlined.




**Changing a Movie's Media Kind** If iTunes has changed your movies' media type to Home Video, you can easily change it right back.

## Add Subscribed Calendars to Your iOS Device

**Q: I subscribe to a number of Google calendars, and while those calendars appear on my Mac, they don't show up in my iPhone's Calendar app. How can I configure the iPhone so that the events show up automatically?**

John Lufkin

**A:** As you've likely noticed, in OS X's Calendar app you can select *Calendar* → *Preferences* → *Accounts*, select your Gmail account, click the *Delegation* tab, and then enable any calendars to which you subscribe. This option, however, doesn't exist in iOS. Thankfully, with the help of your iPhone's copy of Safari, you can add these calendars.

On your iPhone simply browse to the Google Calendar Sync Settings page (go.macworld.com/syncselect). On that page, log in to your Gmail account and then tap the *Sign In* button. In the screen that appears, you'll see listings for not only your Gmail calendars but also your subscribed calendars. Enable the

calendars you would like to sync with your iPhone, and you're done. When you next open the Calendar app, the events those calendars contain will be embedded in your calendar.

## Set Up a FaceTime 'Picture Phone'

**Q: Does anyone manufacture hardware designed specifically, and only, for using FaceTime? I want to give my 90-year-old mother a "picture phone," but if I tell her that it's a computer, she won't use it!**

Bob Kadarauch

**A:** If you want to use FaceTime specifically, you have to select some kind of Apple device. And as you're probably aware, Apple devices aren't one-trick ponies. So the short answer is "no." The longer answer goes something like this.

Let's start with the hardware. Before investing in an iOS device for this purpose, I'd arrange an experiment. Bring your iPad or iPhone or whatever you have, sit down with your mom, and fire up a FaceTime call with someone she cares to talk to—grandchildren are frequently a good bet. If she shrinks away from communicating in this fashion, you have a strong clue that a "picture phone" may not be for her. Many people don't like being put on camera, and if she's among them, I'd respect her wishes.

If she seems to take to it, you can show her how to answer and make calls. If she grasps that and can see and hear to her satisfaction, check again that she likes this sort of thing, and if she gives her assent, pursue your plans.

In regard to specific equipment, if she doesn't need (or won't use) a mobile phone, forget about the iPhone. Its data plan is costly and the device is overkill for what you want to do. If she seems okay using a device that she holds in one hand, an iPod touch is a better option. The $229 16GB iPod touch model is a particularly good choice in that it lacks a rear-facing camera, so there's no danger that she'll accidentally flip from the front to the back camera.

Of course, if you choose an iPod touch for her, you'll need to wire her home for Wi-Fi. This is not something you should burden her with. You take care of it and pay for the service. Just make sure the network will reach to wherever she's likely to use the device.

If you're concerned that she'll move out of range, that holding such a device in her hand will be a problem, or that the text will be too small to read (a problem for many people on iOS 7), get an iPad mini instead and put it in some kind of stand so that she can sit down in front of it for her calls. Place it near a power source and plug it in.

You should take care of the initial setup and create an iCloud account for her. You will use that ID to contact her. I would then move everything but the FaceTime icon off the first few home screens. To make this step more convenient for yourself, create a folder, fling in everything that fits (including items from the Dock), and move the folder out of harm's way. I would additionally turn off Messages (which you can do within the Messages setting) and anything else other than FaceTime that could possibly pop up unannounced.

You'll need to configure FaceTime so that she has ready access to the people she'd like to speak with. To do that, launch FaceTime on the device, tap the *Contacts* item, tap the plus (+) button, and start entering names and the means of contacting those people. I would enter a single point of contact for each one—an iPhone's phone number or an iCloud address, for example—so that all she needs to do to initiate the call is tap the FaceTime entry for that person.

Then conduct a few test calls with her—some in which she answers and some in which she initiates the call. Again, grandchildren are a good motivator. Be sure to show her how to turn the volume up and down.

Finally, check in with her by means other than FaceTime and ask how she's getting on. If there are things that confuse or frustrate her, lend a helping hand (in person). If she's sailing along, casually mention a couple of other miracles the device can perform. Before you know it, she may be telling you how to get more out of your technology.

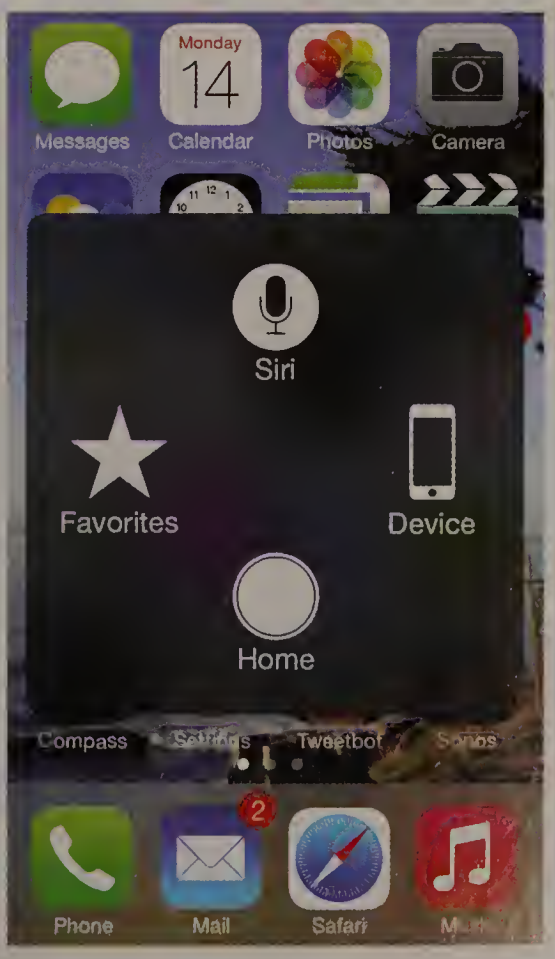
## Get More Touch From Your iPhone Interface

**Q: I have an iPad and an iPhone. I've become accustomed to using multitasking gestures on my iPad's screen—pinching with four fingers to return to the home screen, for example. I then move over to my iPhone, try the gesture, and it doesn't work. Is there anything I can do to gain gesture control over some of the iPhone's features?**

Dale Cardoza

**A:** Sort of. Multitasking gestures are not available on the iPhone or iPod touch, but if you have an aversion to the current avenues for reaching the home screen and other features, I can offer another means.

That means is iOS's Assistive Touch feature. Designed to help those users




**Touch for Assistance** Although it isn't the same thing as multitasking gestures, iOS's Assistive Touch accessibility feature can make moving around your device easier.

who have difficulty manipulating the interface with their hands, the feature can also help people who prefer to avoid the Home button (or can't use the button because it works intermittently or not at all). Find the feature by going to *Settings* ➔ *General* ➔ *Accessibility* in iOS 6 and iOS 7.

Scroll down and tap *Assistive Touch*. On the resulting screen toggle the Assistive Touch switch to *On*. When you do this a gray square will appear at the bottom-left corner of your iPhone's screen, and it will remain regardless of which app you're using. It will fade shortly after it appears. You can move it around the screen by tapping and dragging it.

Tap this square, and the Assistive Touch window appears (see "Touch for Assistance" on the previous page). Here you'll find Siri, Device, Home, and Favorites items. To reach the home screen, tap *Home*. To engage Siri, tap that button. To see other options, tap *Device*. (From the Device screens you can tap buttons for

## Mac 101

# When Read Mail Isn't

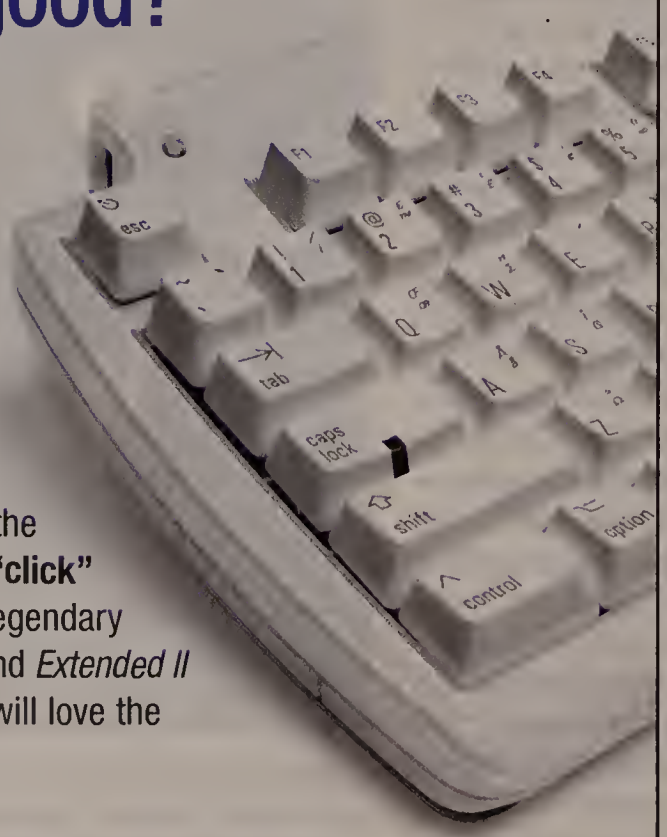
**Q: After I updated to iOS 7, the Mail icon in my iPhone's dock started showing over a thousand unread messages. They weren't unread before I updated. How do I remove this bubble from the Mail icon?**

Arthur Raines

**A:** Invariably this is a problem with Gmail accounts. You have an easy fix. Launch the Web browser on your Mac, go to your Gmail page, and mark all your messages as read. Then, launch Mail on your phone, and allow its message list to refresh; all the messages should be marked as read, and the unread-message count should disappear from Mail's icon.

Now, before you cry, "I have 10,245 unread messages. Don't tell me I have to mark them in groups of 50!" allow me one further tip. On your Mac return to your Gmail page and enter **`is:unread`** in the mail search field. Click the Select box (with the square and down arrow) and choose *All*. Click the *Select all x conversations in Inbox* link (where *x* is the number of unread messages), and you'll select all unread messages, even those that aren't on the current page. Click the *More* box and choose *Mark as Read*. After cogitating, Gmail will do so. Finally, return to Mail on your iPhone and refresh your email there.

Remember when typing
**felt good?**



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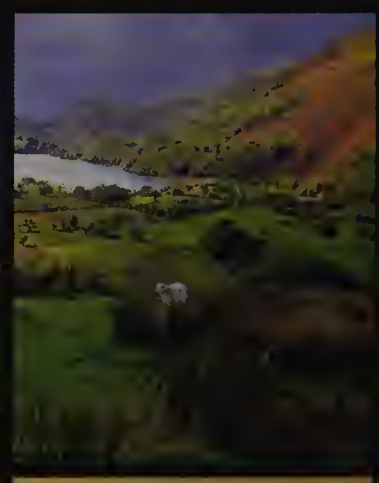

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Lock Screen, Rotate Screen, Volume Down, Volume Up, Gestures, Shake, Screenshot, and Multitasking.)

Assistive Touch hardly mimics multitasking gestures, and some people may find the notion of having to tap their iPhone's screen twice versus pressing the Home button once a waste of a perfectly good tap. But the feature is available should you need or desire it.

## Completely Delete Gmail Messages

**Q: When I delete messages from my Gmail account, they sometimes move to Mail's Trash, and sometimes go to Deleted Messages. I've also found that when I empty the Trash and Deleted Messages, the messages may still live on in Gmail's All Mail mailbox. How, in Apple's Mail, can I really get rid of these messages?**

Richard Applebaum

**A:** On the Gmail website, click the Settings button (the one that bears a gear icon) and choose *Settings*. In the resulting screen click *Forwarding and POP/IMAP*. Be sure that in the IMAP Access area *Enable IMAP* is selected and that *Auto-Expunge On – Immediately update the server (default)* is likewise selected. If you make any changes, click *Save Changes* at the bottom of the screen.

Now launch Mail, choose *Mail → Preferences*, select your Gmail account, and click the *Mailbox Behaviors* tab. In the Trash area confirm that both options—*Move Deleted Messages to the Trash Mailbox* and *Store Deleted Messages on the Server*—are enabled. From the pop-up menu below, choose an interval after which the trashed messages will be deleted (your options are Never, One Day Old, One Week Old, One Month Old, and Quitting Mail). If you want to delete the messages right now, you can do so manually, as I'll discuss shortly.

If Mail's sidebar isn't exposed, choose *View → Show Mailbox List*. Find the entry for your Gmail account, and if its contents aren't displayed, click the *Show* item next to it to reveal its folders. Click the triangle next to the [Gmail] entry to see its contents. Select the *Trash* mailbox and choose *Mailbox → Use This Mailbox For → Trash*.

When you do so, this Trash entry will disappear from its present location and then reappear under Mail's main Trash heading. From now on, when you delete a message, it will leave your Gmail Inbox (as well as the All Mail mailbox) and move to this Trash mailbox.

If you'd like to delete those messages right this instant, <Control>-click (right-click) this Gmail Trash mailbox and choose *Erase Deleted Items*. Confirm that you wish to do this in the sheet that appears, and Mail will not only delete the messages from your Mac but also communicate with Gmail's server and instruct it to delete the messages there as well.

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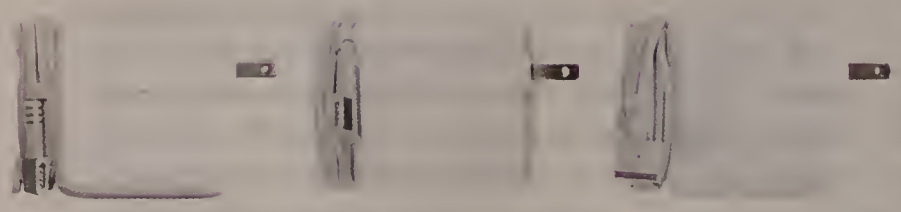

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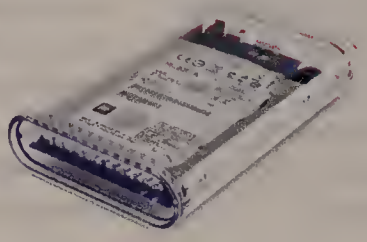

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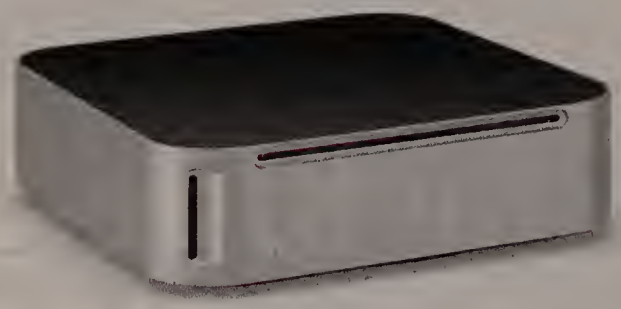

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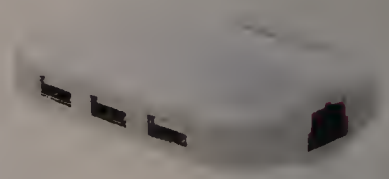

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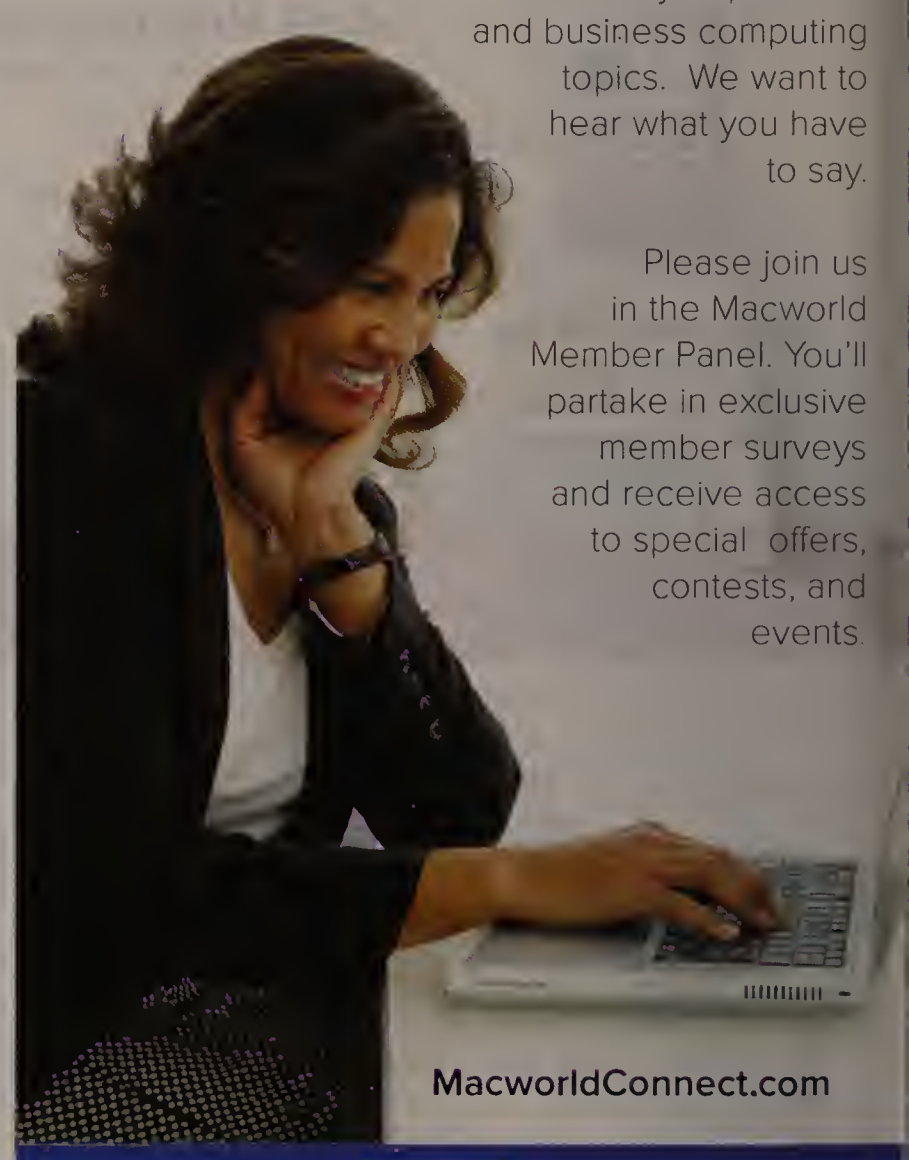

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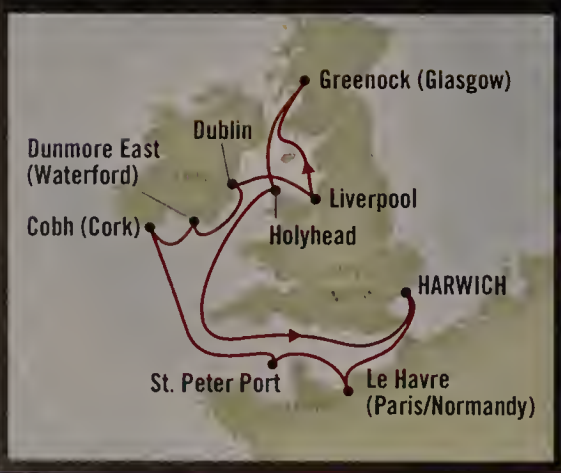


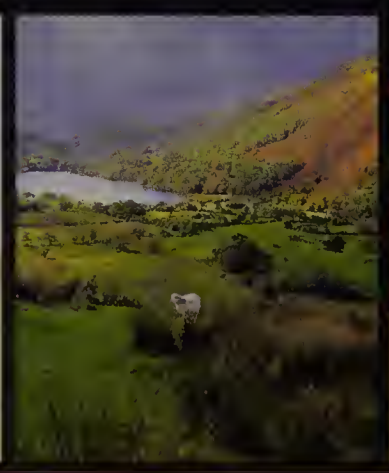

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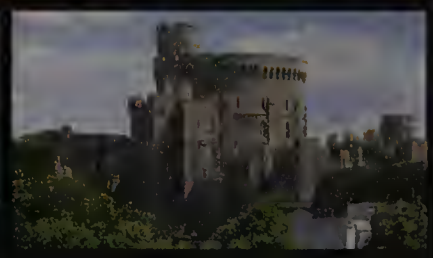

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# At Work With a Podcaster/ Developer

**Podcaster and Red Sweater Software founder Daniel Jalkut details the tools of his trades.**

### What do you do?

I started my career at Apple, quit to earn a second B.A. in music, and then founded Red Sweater Software (red-sweater.com). I also host a podcast called *Core Intuition* (coreint.org) with Manton Reece and another called *Bitsplitting* (bitsplitting.org/podcast).

### What hardware do you use?

My main work machine is a 2010 15-inch **MacBook Pro**. I keep a **Mac mini** always running at home to host my MacBook's backups, integrate software projects, filter spam, and centralize home media.

This year I tried a standing desk: I bought a **GeekDesk** frame and a $100 **IKEA countertop**. When I want to sit, I flip the switch to lower the desk so that I can relax back into my trusty **Aeron** chair.

I've been gradually shifting to a paperless lifestyle, and for this my **Fujitsu ScanSnap S1500M** has helped. For podcasting I have long relied on a **Shure SM58** microphone, but I recently standardized with my podcasting collaborators by getting the **Røde Podcaster**. I also use the classic **MOTU 828** audio interface.

### And what software?

Some of my favorite apps are ones I wrote: I use **MarsEdit** to publish blog entries and **FastScripts** to perform repetitive tasks.

I spend most of my development time in **Xcode**. I use **Safari** not only for Web browsing, but also for handling customer support with the bug-tracking software **FogBugz** and for my company forums.

For text editing not related to programming for the Mac and iOS, I rely heavily on **BBEdit**, where I do most of my Python, HTML, JavaScript, and PHP editing.

I use **OmniFocus** on both the Mac and iOS to keep to-do lists in sync. I use **TextExpander** a lot, to speed up my responses to customer-support email. For personal mail, I use **Mail** and **SpamSieve**.

What else? For Twitter, I use **Tweetbot** on my Mac and **Twitterrific** on my iPhone. I use **Kiwi** as my **App.net** client. For podcasting, I record audio using **Audio Hijack Pro** with **Skype**; and I edit the *Bitsplitting* podcast in **Logic Pro**. The podcast homepages are hosted on **WordPress**, along with the **Seriously Simple Podcasting** plug-in. I use **Acorn** for casual image editing, **Skitch** (1.0 forever!) for screen captures, and **Rdio** for infinite music. Backups are courtesy of **Backblaze**, **Time Machine**, and **SuperDuper**.

### What would be your dream setup?

Apart from the first-world problem of having too many devices, I have no complaints.

*Interview courtesy of* ***The Setup*** *(usesthis.com; Twitter: @usesthis).*

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